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ABSTRACT

The practice of student teaching is used in this report to describe a structural design model for educational practices and to illustrate applications of the model. Developing such a model involves analyzing research studies and describing related practices. The results of the research analysis in this study are applied to student teaching in the context of a one-term time frame, with some portion of each day being devoted to teaching classes in a school. The report, organized into chapters, includes a description of the model for designing an educational practice; a structure for the key elements of student teaching based on a review of research and conceptual studies; an analysis of one student teaching program; and some general conclusions on the use of this model for designing practice and utilizing research for its improvement. An extensive list of references is included. An appendix contains research summary forms, instructional observation forms, weekly progress forms, and final evaluation forms. (LL)

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**DESIGNING EDUCATIONAL PRACTICE:
APPLYING THE STRUCTURAL MODEL OF
EDUCATIONAL DESIGN TO STUDENT TEACHING**

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DESIGNING EDUCATIONAL PRACTICE: APPLYING THE STRUCTURAL MODEL OF
EDUCATIONAL DESIGN TO STUDENT TEACHING

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PREFACE

The improvement of educational practice is a continual process and has been during the past two hundred or more years. Achieving improvement which produces major benefits to educational programs and provides for an accumulation in the knowledge of practice has also been an ongoing goal of educators. The current emphasis for improvement is focused on a better utilization of research, the linkage between theory and practice, and the nature of knowledge in the field of education.

This report provides one model for the organization of knowledge of a practice in education and the process for linking practice to research and theory. The model also provides a structure which can be used to better organize and accumulate the knowledge of practice in a systematic manner.

Applying this proposed model to an actual practice is seen as the best means to both illustrate its various elements and to identify its potential use in the field. The practice of student teaching, which is central to all teacher education programs, is used in this report to describe the model for designing educational practices and illustrate its application. The practice of student teaching has been, in some form, part of teacher preparation since formal programs in teacher education were first established. Modifications and research on teacher education programs have been commonplace until today the literature on student teaching is extensive and the interest in improving this portion of teacher education programs is very

high.

The context of educational practice and the conduct of the practice are usually much more comprehensive and inclusive than the variables used in specific research studies. In essence the knowledge of practice is organized differently and has a different purpose than does knowledge generated directly from educational research. The ideas presented here are based on creating a model of a given educational practice and making it the primary focus with research studies being used in a supportive and informative role.

With the need to improve education for economic, moral, and personal development at the national and international level it is imperative that a systematic means be established which provides for conceptualizing, investigating and aggregating the knowledge for the various practices of education.

In this report an educational practice is defined as an activity or process which has an internal wholeness or structure of sufficient scope to achieve a significant goal and/or purpose. Examples of a practice include a student teaching program, a curriculum development process, the evaluation of students, the management system of a classroom, or a strategy for teaching reading. There are many levels of educational practice which could be classified as a system and/or sub-system.

Two underlying premises for analyzing and organizing the knowledge of a given area of practice, i.e. student teaching, are utilized in this report and provide the rationale and

organizational format for the review. First is the need for a process to organize the knowledge of an area of education in such a way that the focus is on a specified practice, and is not based on a set of research variables. The goal of this process being to provide a structure useful in the design and/or modification of a given practice. A second premise is that research studies provide data that may be analytic, descriptive, evaluative, and/or causal/predictive in nature with each of these forms making an important contribution to the knowledge base for an area of practice. All types of research, therefore, need to be included in a review of studies which provide information for the generation and modification of the related educational practice. Although the various research methods are not always mutually exclusive in their purpose this approach to analyzing studies provides a means to draw together all types of pertinent research and relate it to a practice.

Several different types of field experiences are now in use but the focus in this report is only on student teaching as provided in the context of a one term or semester time frame with some portion of each day being devoted to teaching classes in a school. Not included here are studies related to early field experiences done in conjunction with other courses, i.e. educational psychology and/or introductory methods classes, or internships of longer duration in which the intern is the primary teacher in the classroom.

The following chapters include a description of the model

for designing an educational practice, a structure for the key elements of student teaching based on a review of research and conceptual studies, an analysis of one student teaching program, and some general conclusions on the use of this model for designing practice and utilizing research for its improvement.

The development of this report and the extensive review of literature and conceptual development which was involved was a collaborative endeavor with major contributions from each of the authors.

Chapter 1

A MODEL FOR DESIGNING EDUCATIONAL PRACTICE

New developments in educational practice and research bring to the forefront the unsolved problem of organizing, codifying and accumulating a coherent body of professional knowledge. Concurrent with this problem is the need to improve educational practice by effectively utilizing relevant sources of new knowledge such as that generated through research, and to provide a more organized body of knowledge for teaching new educators.

The conceptual model proposed here brings these issues together in a systematic way by focusing on practice; the context in which practice is carried out; and the existent knowledge or research related to that practice. This model can be applied in all types of educational settings for the development or improvement of professional practice. Further, the extensive use of this design model could lead to the accumulation of a more comprehensive and organized body of knowledge for study and use in the profession.

Real progress in advancing the study of physical science and biology began when the attempt to discover a general law for all natural phenomena was discarded and inquiry was focused on the structure and methodology for generating and organizing knowledge on a more limited basis. This goal to develop a general theory is once again being pursued by physical scientists because of the tremendous results obtained from the use of theory and research which has occurred during the past 200 years. Transferring this

advancement in knowledge about natural phenomena into technology for the application and/or use of research is now represented in the goods and products such as those used in transportation, communication, and medicine. In education such a systematic process and organized body of knowledge has not yet been achieved.

BACKGROUND PERSPECTIVES

During the past 100 years efforts to formulate educational theory and to translate the results of research into educational practice have been only partially successful and have not led to a significant accumulation of knowledge corresponding to that in the natural sciences. It would appear that improving practice and the use of new knowledge in education may require a different process than in the physical and biological sciences.

Both Dewey (1929) and Gage (1978) have proposed ways to think about how scientific knowledge might be used to inform educational practice. Dewey proposed that a background of scientifically developed knowledge could be generated through related disciplines, i.e. psychology and sociology, with the results used to help make informed decisions in practice. The process for translating this knowledge into a form useful in decision making and for translation to actual problems and issues of practice, however, was not sufficiently clarified to be widely used. This concept may have accelerated the study of history, psychology and sociology of education but provided only a limited connection to the central problems of teaching practice. Dewey's

proposal for connecting research and practice appears to be too ambiguous and with too little direction to provide a systematic process for educational improvement.

Gage's (1978) position appears to give greater emphasis to the use of research as a basis for generating practice. The emphasis on investigating teaching techniques and teacher behaviors as a basis on which to build practice appears on the surface to be a logical and scientific method to achieve a sound knowledge base for education. Gage's proposal is predicated on the idea that professional practice is really an art which can be informed by research studies. Yet in this context connecting research studies with the process for achieving a given educational goal is still left open. The need to have a codification of the knowledge of practice within the context in which it is carried out to achieve desired goals, and which can be studied and accumulated in its own right is not central to either Dewey's or Gage's proposals because they do not provide a means for the documentation and explanation of practice in any type of wholistic format.

The concepts of Research, Development and Dissemination, and of Knowledge Utilization represent other attempts to establish greater application of research to improve educational practice. The R-D-D model used in establishing federally funded Regional Educational Labs several years ago has encountered much criticism. Differences in the tasks required for research versus development coupled with the diffusion of scarce resources has

resulted in consideration of other models for carrying out these tasks (Hemphill, 1973; Tikunoff and Ward, 1983).

Hemphill (1973) attempted to more clearly define the distinctions between research, development and evaluation. In this context development is described as a process for putting together a product, process or personal capability which contributes to producing a desired change in the environment. He defined educational development as "the systematic process of creating new alternatives that contribute to the improvement of educational practice" (p. 36). Based on this definition Hemphill (1973) states that "new knowledge [from research] usually becomes useful only after much transformation, adaptation and mixing with other knowledge gained from experience" (p. 36) has taken place.

Tikunoff and Ward (1983) have refined the action research model for educational improvement and tried to integrate all three elements of R-D-D by enlisting researchers, teacher educators and teachers into a collaborative team. This team would plan and conduct the research, develop the results into practice and share their results with others. Such a combination of resources and personnel may be very useful for advancing research, but may not have the generalizability necessary to handle the extensive needs for the development/design of practice throughout the education system.

Using a different mode Holzner and Fisher (1979) have been very analytical in breaking apart the concept of knowledge utilization. Central to their concept is the idea of knowledge

structures (organization) and knowledge transformation. Describing knowledge structures as multiple and dependent upon particular forms of knowledge they describe several issues relevant to the transformation of knowledge among these different structures. Two possible forms of knowledge indicated are scientific and practical. It is primarily to these issues of multiple forms, structure and transformation of knowledge that this proposed model of educational design responds.

The ideas presented here focus on the practice of education, in this case teacher education, and provide a systematic process for organizing the knowledge and the improvement of related practices. Practice, as used in this proposal, represents the activities, tasks, and/or products associated with the field of teacher education. This model is not intended to be a grand theory uniting all dimensions of education. Rather, it represents a process for developing a comprehensive design and/or description of specific educational practices and for systematically relating research findings to practice. In this way the model provides a methodology and framework on which to build a professional knowledge of education.

This proposal can be described as a design model in contrast to a research and development model. Emphasis in education is on achieving goals and the need is to design a means for their attainment. Knowledge useful to practitioners to carry out the necessary functions of teaching needs to be oriented to goals and not to narrowly defined research variables which are

based on the development and/or use of instruments measuring differences in those variables. Knowledge of practice must provide information on all aspects of the task at hand. All professional workers will adapt what they know to the immediate situation, but to not have knowledge of what the task involves and a structural perspective of the knowledge related to the task leaves the practitioner in a position of being a novice with only his/her prior experience and intuition on which to draw.

The model proposed here will be described with a rationale, some underlying assumptions, an explanation of the various components of the model, and a description of how it can be used. An application of this model for student teaching is presented in subsequent chapters as an example of how it is used for modifying practice. The concept of this model should be perceived quite differently from that used in current descriptions of instruction or curriculum design and the common practices of planning used by teachers. Rather, the proposed model can be viewed as a broader and superordinate process for design at the level of major tasks related to educational practice, and as a framework for structuring the knowledge of practice. However, this level of focus does not preclude the process inherent in the model from being used in the design of more limited instruction or curriculum events and products.

Nunan's (1983) criticism of educational designers as being exclusive and that the concept of educational design has become separated from the practitioner could cast a negative perspective

on this proposal. However, the model should be of use to all educators with limitations imposed only in terms of a given individual's level of expertise and experience in its use and not in terms of job title or position.

RATIONALE FOR THE STRUCTURAL MODEL OF EDUCATIONAL DESIGN

The concept of setting goals and designing a means for their attainment is central to education. Applying this concept to develop the organization of the professional knowledge of education has not been highly developed. But, a format to structure knowledge for a field of study together with a system for the development of new knowledge is essential to adequately organize and accumulate knowledge in a field devoted to professional practice. This structure of knowledge and the development of new knowledge should focus on conceptual models of practice not on scientific theory. Given that the purpose of developing knowledge (as in research) differs from that of achieving previously selected goals (as in practice) the organization and generation of an appropriate knowledge of practice will be based on different guidelines. Scientific theory and knowledge derived from formal research studies is essential to improve professional practice, but is not the practice itself. Consequently, the primary focus of professional knowledge needs to be centered on carrying out practice. To achieve this result this model provides a process for building a substantive body of knowledge directly applicable to the design or structure of an educational practice.

The label (structural) given to this model is deliberate as the concept represents the idea of multiple elements of a particular unit or system with each element contributing to the whole and having some type of relationship to the others.

The development of this model with its rationale and underlying principles is based largely on concepts by Simon (1969) and Hiltner (1954). Although used for a different purpose than scientific theory the model does emulate some of the attributes of such theories. The purpose, however, is not to describe and/or explain phenomena, but rather to provide a structure for organizing and developing knowledge as it relates to achieving a particular goal and to provide a means for designing/modifying a given practice to reach that goal.

Simon (1969) describes certain areas of knowledge as the artificial sciences in contrast to the phenomena of natural science. Knowledge structures in this artificial context are distinguished by their focus on some predetermined goal or outcome rather than on a natural event. This concept applied to teacher education supports a knowledge base organized within prescribed boundaries of practice using formal processes for designing the means to accomplish a given goal. Regardless of how one views education in relation to this concept of an artificial science the need to design practice based on a goal or intention is certainly a viable perspective.

In describing the inner and outer environments of a particular design Simon (1969) states that the inner environment

is the actual design formulated to achieve a desired goal e.g., the construction of a building. The outer environment is represented as the setting or context in which the building will be constructed. Without a consideration of the outer environment and the effect of this environment on the design successful outcomes may be limited. In this sense, context and constraints within the setting are major factors impinging on the development and implementation of a given practice. The characteristics and/or conditions of this environmental setting are crucial to the successful achievement of educational practice. Simon also indicates the need for professionals to know how to address the interface between the inner and outer environments as they work to design processes or products to achieve intended goals.

Hiltner (1954) criticizes professional studies as focusing either on specialized knowledge (research and academic areas of knowledge) or on craft knowledge (consisting of technique and routine). The separation of these two dimensions of knowledge and/or an emphasis on only one dimension continues to limit the development of professional workers. In Hiltner's terms the ideal professional worker, possessing the fullness of professional knowledge, would possess a combination of theory and propositional knowledge (e.g., concepts of learning) and the technique for carrying out a given professional practice. To bring about this integration of specialized and craft knowledge Hiltner (1954) suggests that principles integral to specialized knowledge and principles derived from craft knowledge be

developed and matched together. The connections between the underlying principles derived from both areas of knowledge then provide an integration or linkage between specialized and craft knowledge and the essence of a professional knowledge base.

General assumptions reflecting the ideas of Simon and Hiltner can be summarized as follows:

1. Professional practice provides a basis for organizing the knowledge of education.
2. The context or setting of a professional practice is integral to its design.
3. Organizing professional knowledge into a structure according to elements central to a particular practice provides a means for effectively synthesizing the knowledge of practice and for designing or describing the practice.
4. Principles or assumptions underlying the elements of a professional practice provide a link between the practice and related bodies of research.

Practice Focused

Designing an educational practice means that whatever is designed needs to be labeled and perceived as a process, product, or event within a defined set of parameters. A curriculum for elementary school science could be so defined as could a process for the preassessment of a student's knowledge of grammar at the seventh grade level. Classification schemes or taxonomies are frequently a place to begin in the study of a particular set of phenomena i.e., the classification of animals. Northrup (1947) points out very clearly that this natural history form of inquiry grounded in real settings is central to developing an organized body of knowledge. Lewin (1951) has also

emphasized the need for clearly defining the areas central to a field of study.

Given this need for defining a field of study a taxonomy of major functions and/or conditions which constitute the field of teacher education has been formulated from an analysis of research and program descriptions (Hatfield, 1988). One of the areas in the taxonomy is field experience which can be defined as an element of teacher education and at the same time represents a clearly defined portion (an area of practice) of an overall teacher education program. In this way the taxonomy serves as a framework from which to develop multiple areas of practice within teacher education. Activities included in this taxonomy can also be more narrowly defined by relating them to particular contexts, e.g. a student teaching program for secondary science students or a student teaching program in a small liberal arts college. In addition sub-elements within a given category can be defined, for example a process for supervision to be used in connection with a student teaching program.

Based on the rationale and principles previously stated the initial focus of this model is to define a given field of practice and to clarify the possible elements within the field. A taxonomy which provides for this domain of teacher education (Hatfield, 1988) consists of the following six major groups of functions and/or conditions central to teacher education.

1. Organization and resources for teacher education programs.
2. Admission and certification of teacher candidates.
3. Development and evaluation of teacher education programs.
4. Development of teacher education curriculum goals & content.
5. Professional development and induction of teachers.
6. Instructional practices used by teacher educators.

Each of these major categories include several sub-elements e.g., the admission and certification category includes processes for certification and an admission procedure. The development of other fields of professional education, i.e. school management, would require their own taxonomy to define the boundaries of practice.

The categories and sub-elements in this taxonomy identify areas of practice which can provide boundaries for synthesizing knowledge of practice and for designing or modifying areas of practice. Each of the sub-elements can also be identified within a particular context, e.g. admission to a teacher education program in a small liberal arts college, thereby providing more specific areas of practice on which to focus.

Contextual Conditions

The concept of educational design is to provide the processes, products or capabilities necessary to achieve particular goals/purposes. These goals represent the potential outcomes of educational practice and, therefore, the designs are oriented to a given practice within a given context. As described

in the rationale this structural model for design is focused on attaining or producing a pre-conceived result. Educational design, therefore, is not specifically focused on translating research into practice, but is instead a process for organizing knowledge and designing the procedure in which a given goal will be attained within a particular setting. Research studies are used in this process to inform and construct the design using a systematic process, and to provide a basis on which to give greater credibility to the final products.

Yet, the environment or context in which the practice will be conducted is all important for achieving the desired results. The contextual factors or environment are reflected by the setting, resources, personnel policies, etc. which impact the practice in different ways. Therefore, as conditions vary the design must vary and accommodate to these conditions. In any instance where professional practice is carried out there is a specific context or setting influencing how that practice will be used. Differences between types of colleges, length of programs, and student bodies represent some of these contextual factors.

Structure of Knowledge

The concept of knowledge structures which are relevant to practice is necessary to provide direction for both the description of an existing practice and for designing a new practice. The terminology for this concept used here is called a structural model for designing practice. This structural model provides a framework for describing or designing a practice and

for identifying and relating research pertinent to a given practice. The need to develop these structural models in a way which most effectively achieves the desired purpose of the practice is central to the entire process. Describing an educational practice which is designed to accomplish a desired outcome implies a process which integrates all events and activities needed to achieve a specified goal/purpose through some dimension of practice. For example the process of admitting applicants to a teacher education program is intended to provide a qualified set of candidates at the completion of the program. Consequently, a structural format of the knowledge is needed as a framework and guide for focusing the relevant and necessary actions on the desired practice.

The goal of an educational design is to develop a process, product or event which represents a significant and clearly defined goal or purpose and as such is wholistic in nature. Wholistic in this case means that the design will encompass those elements of a practice necessary to achieve a prescribed goal. As described by Eisner (1979) a design needs to be conceived first as a whole with the elements evolving and being defined from this initial conception, or in an artists term the preliminary sketch. To proceed brick by brick to a final design would pose problems of integration and articulation in the completed design.

Principles Which Link Research to Practice

A design model needs to reflect the use of research and

knowledge to determine if a given element of a practice can be justified or if current knowledge refutes some aspect of the design. The key for connecting related research studies to practice is through principles or assumptions of practice which are derived from the existing or proposed design. These principles form the basis of knowledge supporting each particular element in the design. Principles, therefore, represent general propositions reflecting the basic concepts or assumptions of a practice and if negated by conclusions from research studies, imply a need for the modification of or the development of a new design.

DESCRIPTION OF THE STRUCTURAL MODEL

The two major components of the structural model brought into play for any designated area of practice, i.e. a student teaching experience, are (a) a synthesis of knowledge for a given practice which is used to develop the elements within the structural model for that practice, and (b) the process for designing and/or modifying the practice (see Figure 1).

Designing and/or modifying an educational practice includes the same basic processes except that in designing a practice for a new situation the focus is on formulating how the various elements in the design will be conducted. In analyzing a current practice the focus is on developing a description of the structural model in use and on proposing modifications.

Initiating this process requires that elements of the structural model for a given practice be identified and that a

synthesis of the related knowledge is available. This information provides the background knowledge and the organizational structure for the actual design and/or description and modification of the practice.

Figure 1
Structural Model for Designing an Educational Practice

I. PURPOSES AND RATIONALE FOR A SELECTED PRACTICE

This category includes the identification and evaluation of major purposes and goals or expected outcomes for which an area of practice is designed. Research providing information for this category includes descriptive, evaluative and philosophical studies. The rationale includes an analysis of the historical, philosophical and normative conditions related to the designated area of practice, and the justification of purposes. Conceptual reviews and program descriptions provide additional information.

II. CONTEXTUAL CONDITIONS WHERE THE PRACTICE IS USED

These conditions represent the setting in which a practice will be implemented and the multiple factors which can influence successful outcomes. Issues include institutions, personnel, facilities, funding, historical events, and political factors.

III. OPERATIONAL ELEMENTS FOR CONDUCTING A SELECTED PRACTICE

This category represents the major elements or operations of the practice which provide direction and the process for achieving the desired goals. Research of a descriptive nature and occasionally of a causal/predictive type contribute to the development of this category.

IV. EDUCATIONAL ASSUMPTIONS BASED ON THE PRACTICE

This category represents the relationships among the multiple elements of the design and their relationship to the stated purposes and context. The assumptions are stated in a format representing principles or relationships so they can be related to conclusions about the practice derived from research studies. Assumptions can also be the source of further research and/or problem analysis when insufficient information has been developed or questions raised about the specific aspect the practice.

Structural Model

Based on the concepts of Simon and Hiltner a set of categories for organizing a structural model of an educational practice has been developed (see Figure 1).

The purposes and rationale of practice are crucial in this scheme as they represent the definition and intention for carrying out the practice. They define the practice in a manner similar to the description of a natural phenomenon as in the natural sciences. The rationale provides a framework for justifying and analyzing the practice. The contextual conditions provide the environment and as such set the stage for what can occur in carrying out the practice.

The operational elements delineate the events and activities for achieving the goals and thereby the major purpose of the practice. Operational elements developed for the model in any given area of practice will be fairly stable over time with only minor modifications occasionally needed, but with an expectation that major changes will take place when something significant impacts on the practice.

By following the process described here a synthesis of the knowledge relevant to a given practice can be developed. Once developed this knowledge base, can be used to organize a structure of the elements for a given practice. Designs or modifications are specific to a setting, but the knowledge base will be generic and usable across settings.

Developing a Structural Model for Practice

Developing a knowledge structure for a given practice includes the following two activities, (a) a synthesis of research studies and exemplary practices, and (b) the formulation of a set of elements which will constitute the structure of the practice (see Figure 2).

Figure 2
Developing the Structural Model for an Educational Practice

-
- A. Define the parameters of educational practice to design or analyze
 - B. Review and summarize research studies and program descriptions
 - analytical studies
 - descriptive studies
 - causal/predictive studies
 - evaluative studies
 - program descriptions
 - C. Formulate and describe elements of the structural model
 - purposes & rationale
 - contextual conditions
 - operational elements
 - assumptions of practice
-

Synthesis of Research

Central to developing the structural elements is a process for synthesizing research studies and exemplary practice. The knowledge structure developed from this process is distinctive from theory and hypotheses used in research studies, because the purpose to which knowledge is used influences its structure. The focus of analysis for research purposes is to pursue specific variables which can be precisely measured, while the review of research studies for application to practice is to develop a synthesis of all related knowledge organized according to a

general structure directly applicable to carrying out the practice.

Research related to an area of practice can be extensive, but needs to be identified with summaries for individual studies related to a given practice. Selecting the highest quality studies would be a reasonable way to begin to reduce the magnitude of the task. All types of studies including analytic, evaluative, correlational, causal and/or predictive are needed. A format for these summaries includes key information related to the following items (see Research Summary Guide in Appendix A):

- a) bibliographic data
- b) purpose or problem
- c) context of study
- d) study design
- e) conclusions derived from study

It is important to have information from individual studies to use when matching assumptions of practice with conclusions from research studies due to differences in context, purposes/goals and conceptual approaches which may have been used. Developing these summaries represents an ongoing activity, but should be accumulative and widely available. In addition the identification of conclusions suggested by the studies is important as they provide the basis for comparison to the assumptions of practice.

Exemplary Practice

At present few comprehensive descriptions of practices in teacher education have been made. Many program descriptions do exist but in most instances are not adequately documented and consist more of what is planned than what has been implemented.

Current ethnographic studies are more representative of the necessary documentation needed. As these descriptions and/or designs based on the model presented here become available they can be aggregated and integrated into the knowledge base.

The development of sub-elements related to each of these major components of the structural model is based on an extensive review of research and programmatic literature. A form of ethnographic process is used for the generation of categories and the continued testing of these categories to see if they serve as major organizers results in the formation of a set of descriptors which provide the major operational elements of a given practice.

By analyzing the data from the studies and interpreting it in the context of major events for the overall practice, activities or conditions can be proposed which reflect elements central to the practice being developed. Formulating these items in the form of categories or operational elements together with ample descriptions or explanations of their meaning is a key activity in using this model. The synthesis of studies provides information on multiple contexts, and purposes which can be related to specific settings when a design is being developed or analyzed. The implications here are that choice of action is a professional decision based on the desired purpose and the fulfillment of the many operations needed to carry out the practice.

Initially the operational elements identified need to be

tested by analyzing several actual situations where the practice is in use. Revisions in categories will be based on their applicability to provide a framework for the overall actions and compatibility to practice. In addition conducting a field test to describe the particular practice based on the proposed categories will help refine/modify the items. Thick descriptions of each category help provide meaning and differing views of the elements.

Designing a Practice

The major components for a design or modification of practice include (a) plan or analyze the design and (b) test or modify the design (see Figure 3).

Figure 3
Process for Designing/Analyzing an Educational Practice

-
- A. Develop/describe the design based on the structural model
 - State purpose/rationale for the practice
 - Describe context & setting where the design will be used
 - Describe operational elements for conducting practice
 - Formulate assumptions of the practice
 - B. Test/Modify The Design
 - Determine the extent of purposes/goals achieved and outcomes obtained
 - Compare assumptions of practice to research conclusions: (propose modifications where assumptions are negated or outcomes don't match goals of practice)
 - Assess level of implementation for the practice
 - Identify and describe problems limiting success of practice
-

Description of Practice

The design of a new practice or the analysis and modification of a current practice needs to be based on the

structural model and the context in which the practice will be used. Therefore, a comprehensive description or documentation is needed which will include the purposes/rationale, context, operational elements, and assumptions of the practice.

Collecting such information calls for identifying sources of data, instruments, processes and a schedule for obtaining the data. General descriptions found in program proposals and/or catalogs are quite insufficient for this purpose. The problem of identifying the real curriculum in a school from a proposed curriculum is an example of this difference.

A general methodology for describing a practice includes:

1. Define the parameters of the practice.
2. Identify and analyze related documents and materials including the purpose and operational elements of the practice.
3. Interview personnel for intended purpose, operational elements and rationale of the practice.
4. Write descriptions of purpose/rationale, context and operational elements based on documents and interviews, and formulate assumptions of the practice.
5. Validate descriptions of each element through process documentation.
 - (a) Locate and document each element in the context of the ongoing practice.
 - (b) Confirm or revise the description of elements as defined in the ongoing practice.

If a new design is being developed a description of each category and related sub-elements included in the structural model will be proposed; (a) purpose/rationale, (b) context, (c) operational elements, and (d) assumptions of practice. Each of these categories include multiple parts or elements which provide

the fullness of information for a given practice. If a current practice is being modified a full description of each of these categories as indicated in the structural model will be developed.

A new design is developed by formulating the structural model based on the context of the setting. Choosing the purposes from among possible alternatives is the first step in the design process. When the objective is to modify a current practice the same format is used as a guide for analyzing the practice. Interpreting possible options for the practice in relation to the context is done by drawing on ideas from the summary of research studies. Because the knowledge is organized according to major elements of the practice both the research summaries and the structure for the design can be directly related.

Developing a design will obviously be one of the most difficult activities in the process. Development can utilize a very formal process of decision making, but it is basically a heuristic process where considerable creativity is used. The process is not linear. A fullness of design or description will result from a more zig-zag or cyclical process of generation and/or description. As indicated by Eisner (1979) the place to start is with some form of overall picture or general sketch of the entire plan. In this way the purpose could be clarified prior to the investment of extensive time in putting together details. Further, this step does reduce subsequent questions on how the different parts are expected to fit together.

Analyzing an ongoing practice requires considerable care in documenting purposes. Identifying the purposes requires sorting through numerous data i.e., program descriptions, evaluations, and interviewing individuals directly involved in the practice. Purposes may be more fully clarified than the rationale, but are still frequently wrought with ambiguity and implication. Implied purposes or goals seem to be the most common problem when identifying the goals of a practice. Many practices lack written goals and when they are written such statements may not be complete or are not in current use. Consequently interviews together with a detailed investigation are needed to insure that stated purposes/goals are in fact those which accurately reflect the practice.

The following elaboration of the plan's components provide further clarification on developing or analyzing a design.

Purposes and rationale. Purposes represent the desired outcomes for using a practice. Based on the available knowledge, as synthesized for a given practice, purposes provide choices which need to be made in relation to the organizational context. Purposes stated for student teaching have ranged from using it as a culminating experience for a teacher education program enabling pre-service teachers to apply the techniques which have been studied, to giving the student an opportunity to expand on and illuminate concepts such as learning theory. A description of purposes for an ongoing program requires some form of documentation which identifies actual outcomes. The formulation

of purposes for a new program will require both the identification of possible purposes and an articulation of these purposes in relation to the operational elements and the rationale.

A rationale for the practice, and if possible an underlying conceptual basis, provides a reason for the purposes and represents a general perspective on achieving the purposes. A rationale for student teaching would provide a justification or explanation for the stated purpose. For instance, why is it important to have a field experience in a school prior to certification?

The rationale underpinning a practice may not have been developed and/or explicitly stated. However, general impressions by key people may be ferreted out by questioning them on their views of why the practice is functioning as it is and why it became organized in that way.

Contextual conditions. A host of interrelated conditions come together when considering the environment in which a practice will be used. Each specific program is described in terms of its organizational or programmatic resources and environment. In the case of student teaching this information might include relationships with schools, faculty qualifications, and how student teaching would fit into the overall teacher education program. The more comprehensive and objective the description of contextual factors the more valid the decisions will be about the practice.

Contextual data is needed both for new designs and for modifying a current practice. The following information about an institution provides basic information to use in describing the context of a practice:

- (a) history
- (b) structure
- (c) resources
- (d) personnel
- (e) student population
- (f) time parameters
- (g) setting for the practice

Documenting each of these items provides information on possible goals and organization and on potential restraints and resources which may impact on the practice. Any information which restricts or limits the implementation of a practice or may lend support to its implementation is useful.

Operational elements. Development of a new design for a practice will entail a critical review of the available knowledge. This review should provide ideas which can be considered in relation to both the purpose and the context of the practice. The same categories used in a new design will also be described when a practice is being modified. Such an analysis requires a well planned process and instruments for data collection. This process may be somewhat similar across settings, but the information initially available may vary considerably depending on the nature of the institution.

In designing a new practice operational elements are developed by focusing on the intended purpose of the practice in conjunction with the context and the related knowledge base.

Formulating assumptions of practice. Formulating assumptions of practice which underlay the design is another key activity. Identification of relationships among the operational elements and their relationship to the purposes of the practice provide explanations and the basis on which decisions are made during the conduct of the practice.

Principles represent the essence of the practice and provide a means to directly connect conclusions from research studies to the practice. Developing assumptions which reflect the completed design or description of practice is accomplished by reviewing the description of each element in the structural model and formulating declarative statements or propositions on which the element is based. In the student teaching example these assumptions reflect specific events which constitute the operation of the practice. In one sense the statements are similar to research hypotheses in that they propose something which can then be related to conclusions or findings from research and can be either negated or supported. They are not statements used to guide the development of the practice but are derived from the design/description and reflect the concepts or principles for what is proposed or in place. Some examples of assumptions taken from the description of a student teaching program include:

- (a) Student teachers benefit from reflection and self-evaluation activities.
- (b) Directing teachers usually have the greatest impact on a student teacher's experiences.

These assumptions of practice are derived directly from the description of an actual student teaching program and, therefore, reflect actual practice.

Modifying and Testing the Design

The final step in the design process includes the identification of changes to be made in the practice and/or testing the new design. Formulating modifications to change a practice is tied to those instances in which research conclusions negate the principle. When multiple studies provide conflicting evidence conclusions need to be sorted for context and related to the actual context of the practice being studied. Further decisions on implications for modification are based on the purpose and rationale of the practice. Situations in which the principles are supported, but where the outcome is not in alignment with the purpose and/or the rationale of the practice, require care in deciding where modifications are needed. A principle in a student teaching program indicated that directing teachers have a major impact on the development of the students, yet there are instances where the outcomes achieved are in conflict with program goals. Once the principles are negated a redesign of the actual activities or events needs to be pursued. These changes are followed by newly formulated principles with comparisons made to research studies.

A plan for evaluating or testing a design is also important to obtain additional information on the effectiveness of the design. Sanders (1981) describes a model for the development and

evaluation of practice which calls for an ongoing cycle of development and evaluation until program goals are reached at an acceptable level. This concept for testing and redesigning practice gives purpose to the evaluation or testing process and should lead to descriptions of practice which are positive exemplars for people to study. Developing the testing procedure in conjunction with the design/description of the practice is highly appropriate as it increases the possibility of using the results. Further, the desire to achieve the stated purposes requires that a cyclical process of design and testing be performed. In this manner a practice is not continued simply by having been implemented, but is redesigned or modified until a satisfactory level of expectation is met. A general methodology for validating and evaluating the design or modification includes:

1. Conduct process documentation of practice and adjust written descriptions of the practice as indicated from these results.
2. Develop instruments/process and collect data on the outcome of each intended purpose or goal.
3. Identify discrepancies between intended and documented outcomes.

Significant problems for further research can obviously be identified from this process. When no research is identified that relates to specific assumptions or when goals are not achieved and no additional ideas can be generated further research is indicated. The isolation of specific problems or difficulties based on stated principles provides a clear direction for such

research and is directly related to the needs of practice. Further, when goals are not achieved as a result of the design a significant research methodology could be developed to identify the problems which are limiting the desired outcomes.

SUMMARY

Wide-spread use of this structural model for educational design will require several changes in the current system used for accumulating and disseminating knowledge in education. A new format needs to be placed into the system which provides reports of individual research studies that is more extensive than current abstracts. An organized effort to develop knowledge structures for the various areas of educational practice is needed to provide a base on which designs and descriptions of practice can be developed. The categories in these structures may also lead to different descriptors for classifying research studies. An organized effort is then needed to implement individual projects for designing practices in new settings and/or describing existing practices.

CHAPTER 2

A STRUCTURAL DESIGN MODEL FOR STUDENT TEACHING

Developing a structural design model for an educational practice, as described in Chapter 1, involves an extensive process of analyzing research studies and descriptions of related practice. The results of such an analysis are presented here in the form of a structural model for student teaching. Proposing the key elements for the model is a matter of judgment and must be perceived as somewhat arbitrary even though the labels used here have been identified from studies which include these terms. These elements are used for describing how student teaching is carried out and for generating the underlying assumptions of the design. They also serve as the structure for creating a new design of practice.

The major categories for the structural model of student teaching as identified here include (see Figure 4 for additional detail):

- a) Purposes and Rationale
- b) Contextual Conditions
- c) Operational Elements
- d) Assumptions of Practice

No one perspective for student teaching is given priority here as several different possibilities for practice are identified from the studies and may be applicable to meet different purposes and for use in different contexts. The contextual conditions in which a particular program will be established provide additional

information on the decisions for designing a particular model.

Figure 4
A Structural Model For Student Teaching

PURPOSES AND RATIONALE FOR STUDENT TEACHING

- A. Purposes and expected outcomes
- B. General perspectives and rationale for student teaching

CONTEXTUAL CONDITIONS OF STUDENT TEACHING

OPERATIONAL ELEMENTS FOR STUDENT TEACHING

- A. Curricular goals and content
- B. Program organization
- C. Program activities and experiences
- D. Supervision and evaluation of practice

ASSUMPTIONS OF PRACTICE

- A. Assumptions of practice implied by the design
(relationships between purposes, context and
operational elements)
-

PURPOSES AND RATIONALE FOR STUDENT TEACHING

The general purposes for student teaching together with the overall perspectives of practice have evolved considerably since these programs were first established. At the first public supported institution for teacher training in Berlin in 1788 (Armentrout, 1927) "...practical experience was gained through visitation and observation of the regular school work, by assisting in the class work of the regular teachers, by oversight and care of indifferent or backward pupils, and by actual teaching according to instructions and under the supervision of the director" (Luckey, 1903, p.37).

Purposes

The classical and continuing concept of student teaching was stated by Dewey in 1904 (Archambault, 1964) in his comments on the theory and practice of education. According to Dewey

professional laboratory experiences might conceivably be designed to achieve two purposes: the development of teaching techniques (survival skills) and the understanding of principles of education upon which practice should be based.

Another view of student teaching at about the same time period (Holmes & Seeley, 1903) indicated the following purposes for Normal School teacher trainees including the practice dimension of the program:

1. Knowledge of the subject in itself and in relation to the development of the child mind.
2. Sufficient practice in the organization of subject matter to offset the fact.
3. Knowledge of the processes and principles that underlie the learning and teaching of the subject.
4. Some familiarity with the way this works is actually done with and by children.
5. Cultivation and discipline, specifically, certain essential traits of mind, habits of thought, and elements of character.
6. Power to put the fund of knowledge given by the teacher of theory into use, in a practical adaptation of it to a class of children. (pp 16-17)

The adoption of a new standard for professional laboratory experiences in 1949 by the American Association of Teachers Colleges (McGeoch, 1953), based on the Flowers study, proposed that student teaching have the following multiple purposes and functions.

The significance of direct experience in the learning process requires that the curriculum of teacher education make provision of such experience, for the need is great at all maturity levels. To build the resourcefulness needed by today's teacher in meeting varying and different situations requires many

opportunities to study the major professional activities of the teacher by participating in such activities. There is need for direct experience to develop understanding that goes beyond verbalization and fixed skills; to develop action based upon thinking and flexible and creative use of skills. Such direct experience for the teacher-to-be may be called professional laboratory experiences. These laboratory experiences should provide:

1. An opportunity to implement basic concepts and ideas discussed in college classes so that the student may study the pragmatic value of the theory and check his understanding of the theory in action;
2. help for the student in seeing his needs (both personal and professional) and outlining experiences which should be included in his further study; and
3. an opportunity for the student to study his ability to guide actual teaching-learning situations. (p.198)

A broad perspective on the purposes for a specific student teaching program is described by Boardman and Carlson (1950) as;

1. The development of some measure of skill by student teachers in certain fundamental methods, procedures and techniques used in the teaching and learning process.
2. The development of a greater degree of mastery of subject matter content and of educational principles and implications involved.
3. The development of desirable professional interests, attitudes and ideas.
4. The development of desirable personal characteristics and of desirable relationships with others. (p.1-2)

The series of National Education Association TEPS (Teacher Education and Professional Standards) conferences held between 1958-1960 illustrate the attention given to student teaching purposes. A few references such as the following are made by the discussants regarding the kinds of activities which should be provided (Hodenfield & Stinnett, 1961), "supervised professional

experience...should include observation, participation... and competence in the methods of teaching and use of instructional materials" (p. 57). Most of the discussion in these conferences on the subject of field experiences, however, related to logistics and timing as an organizational issue.

Based on a well developed statement of purposes for practice Furlong et al. (1988) studied a one year post-BA program in the United Kingdom. Program aims identified for students in this study included:

1. Students should evolve and develop a broad range of practical teaching skills.
2. Appropriate personal and professional qualities should be fostered and developed.
3. Upon completion of the experience the student should have progressed towards formulating a personal educational philosophy.
4. The student should engage in the systematic analysis of practice.

A different dimension of purposes highlights the emphasis on in-class teaching experience versus a broad range of engagement in the community at-large (Barnett, 1975) as a means to better understand the school and students.

The limited attention to researching purposes of student teaching is highlighted by Gallemore (1981) in a study which used the perceived roles of the various individuals involved with student teaching programs as the basis on which to rank program objectives. The objectives were ranked by priority and by perceived outcomes. In this context the purposes implied could be described as applying techniques, personal and professional

growth, applying professional knowledge, and problem solving.

The continuing evolution of field experiences for preservice teachers and specifically for student teaching have not significantly changed the purposes. Most changes in programs have been in timing, organization and supervision. Some of the purposes may have been given greater priority with a change in program emphasis and prerequisites.

In a study by Flowers (1948), conducted for the American Association of Teachers Colleges, student teaching was based on a definition of professional laboratory experiences which included "all those contacts with children, youth, and adults (through observation, participation, and teaching) which make a direct contribution to an understanding of individuals" (p.7). In the same study student teaching was defined as a portion of the professional laboratory experience which was "...the period of guided teaching when the student takes increasing responsibility for the work with a given group of learners over a period of consecutive weeks" (p.7).

In a study on the functions of an elementary student teacher Iannoccone and Button (1964) provide a general definition of a student teacher as "a student who, in the process of preparing to teach, spends part or all of her time for a semester or quarter in an elementary classroom observing and teaching under the guidance of an experienced teacher" (p. 1).

The current standard for professional laboratory experiences used by NCATE (1990) is stated in Standard II.A: Clinical and

Field-Based Experiences, "The unit makes certain that clinical and field-based experiences in the professional education curriculum are designed to prepare students to work effectively in specific education roles" (p. 49). The following items provide the Criteria for Compliance:

(24) Field-based and clinical experiences are systematically selected to provide opportunities for education students to observe, plan, and practice in a variety of settings appropriate to the professional roles for which they are being prepared.

(25) Clinical and field-based experiences provide education students with the skills that allow them to diagnose and solve problems that involve the application of the principles and theories from the knowledge bases of the particular professional program.

(26) Field-based and clinical experiences are accompanied by professional supervision and feedback that include attention to instructional plans, characteristics of learners and instructional settings, structured observation of the experiences, and detailed debriefing relative to program goals.

(27) Education students participate in field-based and/or clinical experiences with culturally diverse and exceptional populations.

(28) Field-based and clinical experiences are sequenced to enable education students to develop the skills that will enable them to assume full responsibility for classroom instruction or other professional roles in schools.

(29) The student teaching experience is direct, substantial, and full-day for at least 10 weeks. [NOTE: This criterion applies to the basic unit only.]

(30) Three-member teams of the college-based supervisor, field-based supervisor, and education student have a well-defined charge to support a successful experience as the education student assumes full-time responsibility in the school setting.

(31) Sites are carefully selected for all field experiences, including cooperating schools and other professional internship locations, so that students are

provided experiences consistent with the goals of the unit's programs.

(32) The roles and responsibilities of education students, college-based supervisors and field-based supervisors who participate in field-based and clinical experiences are delineated in negotiated written agreements. (NCATE, 1990; pp 49-50)

Conant's (1963) study of teacher education resulted in his perception of student teaching as central to validating a person's capability to assume responsibility for a classroom.

I have found two points on which all are agreed [participants in the study]: First before being entrusted with complete control of a public school classroom, a teacher should have had opportunities under close guidance and supervision actually to teach. (p. 59-60)

Building on prior proposals and the general practice then being followed Andrews (1964) stated that;

student teaching has long been that initial experience; when the college student directs the learning of a group of pupils under the immediate observation of an experienced teacher. Success in student teaching is regularly accepted as evidence both of demonstrated performance and potential, and together with an adequate record in other requirements entitles the student to a recommendation for a teaching certificate." (p. 1)

A significant variation between espoused and actual purposes and goals for student teaching, and outcomes is indicated by these studies. Many teacher educators are in favor of a reflective and conceptual development focus yet in actual practice such activity is uncommon (Bolin, 1988). Perhaps this dichotomy is illfounded when considering the complexity of teaching. A place for multiple purposes in the program has been stated by many educators and despite the limited success in

meeting the different purposes the question is to provide greater clarity, communication and opportunity to achieve the multiple purposes. The evidence appears to support the attainment of these multiple outcomes.

General Perspectives and Rationale

The purposes described above are considered essential for the development and certification of teachers. The general perspectives and rationale supporting these purposes of student teaching can be identified from studies describing and/or defining practice and providing information on outcomes.

Dewey (1904) provides a basic rationale for the use of student teaching which continues to clarify some of the important issues to be followed in organizing new experiences.

On the one hand, we may carry on the practical work with the object of giving teachers in training working command of the necessary tools of their profession; control of the technique of class instruction and management; skill and proficiency in the work of teaching. With this aim in view, practice work is, as far as it goes, of the nature of apprenticeship. On the other hand, we may propose to use practice work as in instrument in making real and vital theoretical instruction; the knowledge of subject-matter and of principles of education. This is the laboratory point of view. (p. 9)

Goodlad (1965) put the student teaching experience into perspective by indicating that "student teaching is usually the climax of the preservice phase of teacher preparation, the point at which school and college personnel should assure themselves that the neophyte is a promising inquirer into and practitioner of teaching." (p. 266)

In a more philosophical perspective Wilson (1975) suggests

that practice as provided in teacher education programs can induce: know-how, skills and project responses to immediate situations; develop a propositional understanding and awareness and self-consciousness about what its like to teach a subject; and build confidence and caring about a class and achieving success (p. 136-137).

Looking at student teaching experiences from a research perspective based on personal development theory Fuller and Bown (1975) proposed that student teachers will progress through multiple stages of concerns. These stages include a concern for survival in the class, responses to teaching situations, and concern for pupils.

Outcomes are hard to identify given all the potential effects a student teaching experience can provide. A view of expected purposes may be interpreted from outcomes. MacDonald & Zaret (1971) carried out a study to identify outcomes from a student teaching experience. Their conclusions indicate that student teachers' perspectives following student teaching are considerably different than after their first year of teaching; that supervisor predictions of a candidate's success in their first year of teaching is high; and that the level of a student teacher's decision making and problem solving behavior can be influenced by certain types of student teaching experiences.

Further, positive outcomes are found in the areas of trust and acceptance of interpersonal behaviors, knowledge of the teaching role and techniques of teaching (Lantz, 1964; Poleszak,

1964). In another study of elementary and secondary student teachers (Morris & Chesson, 1978) it was determined that eight weeks of student teaching led them to being more concerned with the academic achievement of their students. However, across different majors and grade levels considerable variation in the types and changes in concerns were found.

In a more negative sense other studies report student teachers' values and attitudes becoming more conservative, becoming less openminded and showing a decrease in principled morality (Dispoto, 1980; Mahan & Lacefield, 1978; Parkay, 1982; and Tabachnick, 1981). Studies by Fink (1976) and Silvernail & Costello (1983) show the development and/or the adherence of a custodial attitude toward students as the outcome of student teaching. Yet, this outcome has also been equated to a successful student teaching experience. The attitudinal shift indicated in some studies, however, may be more situational specific as indicated by Boscher (1978) who measured the effects of student teaching on four basic educational philosophic perspectives and found no significant changes. The contexts in which these studies were conducted is a variable with limited consideration. But in a study on educational values of student teachers Nelson and Ahmed (1972) concluded that values vary across teaching fields, by gender, by age, and change may be affected by the length of experience.

A study of seven student teachers by Ralston (1980) illustrates the effect of a student teaching experience on

secondary English majors. These students voiced a definition of a model teacher as non-text oriented, creates excitement, looks good, has good discipline and creates interest in the subject. The consequence of student teaching negated this model and led to a feeling of separateness, self-preservation, following the rules and having lower expectations for the students. Similar results were identified in a study by Tittle (1974).

Perhaps the most significant finding comes from studies which indicate the outcomes of student teaching are general, not highly focused, and related more towards the student teacher's interpersonal interactions (Griffin, 1983; Tabachnick & Zeichner, 1984; Wheeler & Knoop, 1982). These studies seem to imply a focus on relationships among the participants and the development of rather ambiguous overall impressions about the capability of the student teacher.

In a study to identify the effects of student teaching for a specific program it was found that the curriculum design, which had defined objectives, was not adequately implemented to achieve them (Tabachnick et al., 1979-80). Program purposes included; being reflective, being autonomous and responsible, self-fulfillment, and active involvement. On the other hand the degree, clarity and consensus among staff for these goals was not indicated as having been established for the course.

A major study of student teaching, as summarized by Griffin (1989), indicates positive perceptions of colleagues in the student teaching triad, satisfaction with the experience,

expectations being met, and satisfaction with evaluations. These four outcomes were also correlated with each other. Given these outcomes the conclusion is made that "there is a pervasive ethos in student teaching (an implicit set of values and beliefs) which guides and directs the practice and evaluation of student teachers" (p. 358). The best predictor of these outcomes appears to be the level of empathy held by the student teacher. In addition Griffin concludes that "supervisors did not use a systematic, codified knowledge base; rather, student teaching involved positive interpersonal relationships and focused on specific classroom situations or occurrences" (p. 359). In this study there was an absence of public and enforced standards of performance and nearly all student teachers passed.

In a follow-up study of first year teachers in North Carolina Queen and Gretes (1981) found that 51 percent of the teachers indicated that some type of field experience had been the most valuable aspect of their preparation program.

Student teaching is a central component of teacher preparation programs providing the setting for experiential development and application of prior study. The outcomes are supported by studies which indicate the achievement of teaching performance and professional socialization which meet the standards set for quality work. As the purposes are explored further alternate directions for student teaching are espoused which call for different curricular goals and experiences. The general purposes are, however, fairly consistent and provide the

basis on which to develop the operational elements for the program design.

CONTEXTUAL CONDITIONS OF STUDENT TEACHING

The contextual conditions in which student teaching programs are conducted vary extensively, yet in most research studies this information is not described (Zeichner, 1986). At the same time McIntyre (1983) argues that "to understand the field experience, one must assess the elementary and secondary school settings and programs where students are placed and examine how that environment influences the triad's interaction" (p. 16). These contextual conditions will include institutional demographics, personnel and resources.

The institutions involved in student teaching normally include K-12 schools and institutions of higher education. In addition student teacher specializations range across the entire spectrum of the school curriculum from kindergarten to physics to special education. The cooperating schools are located in communities which range from rural, to urban to suburban and other more unique settings such as Indian Reservations. The institutions of higher education range from small private liberal arts colleges, to large public research universities. These multiple settings and contexts reflect very divergent needs, resources, personnel and students.

In some states arrangements for student teaching between schools and higher education institutions include written agreements. In addition some states have criteria for the

selection of cooperating teachers and college supervisors (Morris, Pannell & Houston, 1985). Another issue of importance to schools is the legal status of student teachers with most states providing some form of statutory authority for students while they are working in schools (Morris & Curtis, 1983).

The coordination and funding of student teaching programs within higher education institutions also varies. Some programs within a single institution are completely autonomous by department. In these cases each department with a teaching major will provide coursework and supervise their student teachers. Such specialization provides great diversity among the actual programs. Individuals serving as college supervisors come from a variety of disciplinary areas as do cooperating teachers and all have a variety of perspectives and abilities (Zeichner & Liston, 1984). These conditions limit the opportunity to have widespread agreement on expectations and standards.

There is almost a complete void of specific research studies examining the university supervisor. Griffin (1983) noted that, "as far as the selection of a university supervisor is concerned, it is difficult to locate published literature explaining or guiding this process" (p. 16).

It is recognized that setting, essential personnel, personal factors, and more importantly, feedback, will affect positively and negatively the direction of change by the teacher candidate. Little work has been completed to establish processes which may be crucial for practice by essential personnel (cooperating

teacher and university supervisor) in order to guide positive development by the teacher candidate. At best, it appears from the available research, that it is assumed these persons will have the knowledge, skill, and processes necessary to positively affect the desired growth of the candidate.

OPERATIONAL ELEMENTS FOR STUDENT TEACHING PROGRAMS

The operational elements related to student teaching programs include a broad range of activities and conditions. The major categories identified from the review of related studies and practice as used here include:

- Curricular Goals and Content
- Program Organization
- Program Activities
- Supervision and Evaluation of Practice

Curricular Goals and Content

An extensive range of goals, both stated and implied, are attributed to the student teaching experience. These goals and outcomes are far ranging and reflect the view that student teaching is both somewhat autonomous and at the same time very comprehensive.

The extent of goals which have been considered in the literature is reflected by major clusters of goals identified from program descriptions and research and evaluation studies. The major focus of the goals identified here are grouped under the following categories:

1. Professional and School Socialization
2. Professional Skills
3. Professional and Subject Area Knowledge

Information provided here on the various goals include the

types of goals/content incorporated in student teaching programs and the meaning or description and outcomes of these goals as reflected in studies of student teaching programs. This synthesis of goals provides a set of potential curricular goals and content for student teaching programs. The assumption is that those items investigated by researchers as being impacted by the student teaching experience are being thought of as possible outcomes and therefore possible goals for the programs.

Professional and School Socialization

A review of these studies on the goals and content of student teaching is, however, limited by the nature of the research. Although numerous studies can be identified many of these relate primarily to the cluster of goals under the heading of professional and school socialization. As indicated by Zeichner (1985) studies focused on professional skills and knowledge are somewhat limited.

Student teachers are in a transitional stage between being a student and being in a professional work environment. Coupled with this situation is the expectation for achieving and demonstrating certain program goals. Also included as goals is the development of a "teaching style." The "perception of teaching and a teacher's role," and the "self-confidence" necessary to fulfill this role underlie the entire student teaching experience (Adler, 1982; Beyer, 1984; Bolin, 1988; Tabachnick & Zeichner, 1984; & Tittle, 1974).

It is this broad view of the experience coupled with an

emphasis on specific classroom situations which have sometimes been alluded to as representing a lack of focus instead of stating clear expectations for the experience (Griffin, 1989). Still, programs include some form of evaluation of the experience and it is here that expectations can also be identified (Shivley, 1982). These expectations, however, are somewhat uneven in that basic areas which could result in a student not passing (or in getting a very low grade) are clearly tied to the common concern with classroom management (Barnes & Defino, 1983; Fink, 1977; Goodman, 1984).

A further issue in describing goals is the belief that the development of a deliberative and reflective way of thinking (Stout, 1989; Zeichner & Teitelbaum, 1982) is a much desired outcome in contrast to the mere demonstration of professional skills at a technical level. Communicating and agreeing on these different views among the many different individuals and institutions involved in programs adds further difficulty to defining program goals.

The research studies examined on affective development investigated attitudes and beliefs in relation to the development of teaching but none begin with a description of a program of study designed to guide the professional development of teacher candidates. But, given the extensive visibility for these attributes in student teachers they need to be considered, at this time as part of the curriculum.

Attitudes are part of the student teaching milieu and are

frequently included in summative evaluations. The studies reviewed demonstrate that attitudes may be affected, both positively and negatively, by pre-student teaching experiences, the cooperating teacher, the university supervisor, personal socio-economic background and the feedback received (Griffin, 1981; Moorefield, 1974; Stillwell, 1980; Weinstock & Poccolo, 1980). None of the studies reviewed included a program of study designed to specifically create certain mind-sets for the student teachers. Apparently it is expected that the cooperating teacher, university supervisor, peers, and significant others will impact on the attitudes of the student teachers. None of the studies provided guiding data as to processes which provided a positive direction of attitude development.

Affective areas have historically been considered a part of the evaluation process contributing to the development of a student teacher prior to licensure. Hicks and Walker (1957), in a 23 item appraisal sheet for evaluating a student teacher, included 11 items which may be considered in one or more of the areas of attitudes, beliefs, values, and self-concept. Their 36 item Student Teaching Profile included several items related to these areas.

Stratemeyer and Lindsey (1958), stated that, "the entire program of teacher education is designed to help the teacher-to-be to grow in the understanding, attitudes, and skills basic to the work of the citizen-teacher in today's society" (p. 430). They were concerned with an instruction/supervision/evaluation

process during student teaching which would assist the student teacher in attitude, belief, values, and self-concept development so as to become an effective member of the professional community. They suggested that "personal qualities be conceived as factors that affect teaching" (p. 442).

The expectation that these affective areas be included as part of the student teaching evaluation process to be applied to teacher candidates is indicated by Henry and Beasley (1976). They include eight sub-categories in a list of 22 specific items which should be evaluated. Their evaluation criteria was divided into categories of Personal Qualities (nine sub-categories), Professional Qualifications (four sub-categories, and Teaching Skills (nine sub-categories). Personal Qualities contained five items related to attitudes, beliefs, values, and self-concept. Three of the four items under professional qualities were concerned with affective areas.

Stillwell (1980) administered the Minnesota Teacher Attitude Inventory to 64 elementary education teachers during the first, eighth, and sixteenth weeks of student teaching to determine changes in attitudes. The change in attitude during the term was negative with the candidates becoming more restrictive of pupil freedom, increasing use of comparison of pupils, and the use grades for disciplinary action. The major shift in attitude was between the first and eighth week with general stability between the eighth and sixteenth weeks.

Weinstock and Poccolo (1980) studied a sample of 156 teacher

candidates (97 secondary and 59 elementary) using the MTAI and the Logical Consistency Scale. Comparisons were based on seven weeks of student teaching. They concluded that elementary majors remained more logical in their ideas about education than secondary majors. Secondary candidates had a lower level of logical consistency and desirable teaching attitudes. Moorefield (1974) studied 15 secondary social studies teachers to determine attitude changes. He concluded that candidate's concerns were a result of insufficient positive feedback during the experience. Possibly teacher candidates need to enter the experience with a more realistic view of pupil interest in social studies, and cooperating teachers need to be sufficiently available to provide feedback.

Attitudinal changes appear to be influenced by factors other than context alone. Different socio-economic settings may contribute to some change, but it appears that change may well be more a result of the assumption of the responsibilities of teaching (Griffin, 1981; Weinstock & Parcolo, 1970). These concepts are accepted as important in the summative evaluation of student teaching.

Studies have consistently demonstrated that attitudes, beliefs and personal development are an important phase of the evaluation to determine the success of teacher candidates. Since these studies consistently used student teaching experiences as the key experience variable, it logically follows that formal study relative to attitudes, beliefs, and personal development in

advance of student teaching simply is not included in the curricular content of teacher education. However, the studies provide sufficient evidence to support that attitudes, beliefs and personal development are included in the informal curriculum; that is, the instruction a teacher candidate receives from various supervisors primarily through formal or informal evaluations which in turn will shape the candidate's development.

One of the outcomes of student teaching given major importance is the development of a person's self-confidence about their teaching (Tittle, 1974). Closely associated with the perception held about teaching, student teachers will either build or lose their level of self-confidence during their school experience (Smith & Adams, 1972). Self-confidence may not be an overt goal but it certainly reflects a necessary condition for a student teacher to be successful. In this sense building self-confidence is dependent on success and contributes to further success. Confidence is a vital factor in successful task performance. Lack of belief in one's ability creates a tendency to act hesitantly, often interfering with successful job performance. Equally detrimental is a person who does not adequately consider all factors relative to job performance. Development of confidence in one's ability is recognized as a needed characteristic of a successful teacher.

A desirable goal for personal development would be to have teaching situations where the candidate will experience success while also being able to identify specific needs for improvement.

The instructional goal would be essentially the same as with any teaching-learning situation. Tasks must be within the framework of experience, relevance, content, and need.

Peterson, Kent and Hines (1981) used a Q-sort process to examine self-concept changes during the student teaching experience. A total of 196 students at the University of Utah and the University of California-Berkeley were tested with 92 providing both entry/exit data. The candidates entered with similar high levels of self-concept. The study showed a steep decline at mid-term of the practicum. The exit mean score showed some recovery but did not approach the initial level. Obviously, the practicum experience seriously affected the teacher candidate's positive self-concept. Factors which may have contributed to the changes, however as in many of the studies, were not identified.

Smith and Adams (1972) reported a study at Louisiana State University which produced results interpreted differently than Peterson, Kent, and Hines (1981). Using used two scales, self as a person and self as a teacher 30 self-concept statements were administered to 100 student teachers. Their results show a positive change in self-concept for 70% of the sample. Elementary candidates had greater positive change than junior or senior high candidates with persons in inner-city schools having a more positive change.

Soares and Soares (1986) compared student teachers' self-ratings of self concept with those ratings made by the

cooperating teacher and the college supervisor. The 111 candidates (59 secondary and 52 elementary) all had positive self-concepts. The candidates were similar in self-ratings with those given by the college supervisor, but were lower than the cooperating teacher ratings. The elementary majors self-ratings were consistently higher than self-ratings of the secondary majors. Soares and Soares (1986) determined that self-concept scores of elementary teacher candidates after student teaching are consistently higher than the secondary candidates. There was a higher correlation of self ratings with the university supervisor than with their cooperating teachers. All candidates were in suburban schools so type of placement did not appear to be a factor.

Self-concept becomes a vital component if the teacher candidate is to have a successful experience while also developing positively in skill and knowledge areas. Several studies have included references to describe and evaluate the importance of the cooperating teacher in this process: (Bills, et al., 1964; Chiu, 1975; Fisher, 1980; Friebus, 1977; Gallemore, 1979; Geltone, 1980; Goodman, 1983; Griffin, 1983; Hoy and Rees, 1977; Konefal, 1981; Levin and Feeney, 1970; Moorefield, 1974; Nelson and Ahmed, 1972; O'Neal, 1983a; O'Neal and Edwards, 1983; Sapario and Sheehan, 1986; Waters, 1973; Zeichner and Liston, 1984; Zevin, 1974; Zimpher, et al., 1980.) These studies demonstrate that the cooperating teacher and, to a lesser degree, the university supervisor, are important persons

affecting the outcomes of student teaching. The studies have, however, provided little specific data describing the development of self-concept for the teacher candidate during the practicum experience.

Several studies do examine factors which influence the success or views about the practicum experience. Goodman (1984) studied 12 student teachers to examine factors of social control. He identified three important school factors representing control of student teachers' behaviors: (a) the elementary school curriculum (a primary force); (2) accountability and testing; and (3) managerial demands. Cooperating teachers influenced the teacher candidates by their attitudes. Mostly, they viewed the student teachers as aides. Although this study did not specifically examine self-concept, the description of institutional and social forces influences certainly could be interpreted as influencing self-concept. Linan-Hang (1975) perceived teaching competence with 46 female elementary student teachers. He found the student teachers' ratings of self were consistently higher than those made by the cooperating teachers. Post-test ratings were consistently higher than the pre-test results. The factors which may have contributed to the ratings were not examined. Cohen et al. (1972) administered a 122 item questionnaire on concerns about teaching to 139 elementary majors (two males) during the eighth week of a ten-week student teaching program. Over one-quarter of the variance was concern about "being an effective teacher."

Smith and Adams (1972) developed a Likert scale type questionnaire for "self as a person" and "self as a teacher" to measure changes in self-concept with pre-and-post measures from student teaching. The results indicated that positive change by females exceeded that of males. The total group change was positive. Assignments in the inner-city produced a more positive self-concept than those in suburban schools. Sapario and Sheehan (1986) used two measures to examine the feasibility of evaluating creativity, dynamism, warmth and acceptance, and organized demeanor. The Shapiro scale was considered potentially more useful because it had greater specificity for teaching behaviors. The scales were intended to provide a basis for providing necessary remediation. This study only considered the feasibility of using the scale for evaluation purposes.

The concept of occupational socialization is defined by Corbett (1980) as "the process by which a new member to an occupational group becomes acquainted with the culture of the occupational group, including the norms adhering to the role which the new member is to perform." In this perspective socialization is obtained primarily through interactions and experiences with individuals within a given role group. Some studies (Hoy & Rees, 1977; Iannoccone, 1963) report changes in student teachers perspectives during their experience in relation to the degree of control and bureaucratic orientation which they exhibit. Development of these patterns of thought and action (Iannoccone, 1963) appears as student teachers shift their role

from an observer to full time teaching. The wide disparity in the field about the nature of teaching and appropriate teaching styles places severe limitations for what student teachers can be held accountable. Iannaccone (1963) used the daily logs of 25 student teachers to examine phases of student teaching. He identified three distinct phases;

1. Preparation to teach: characterized by more formal references to the teachers by name.
2. Becoming engaged in the classroom primarily by observation: characterized by identification of disagreement with practices of the cooperating teacher.
3. Teaching the entire class: characterized by changing from formal (see #1 above) to "we" and accepting practices criticized (see #2 above) as "good" for the student.

In other studies (Friebus, 1977; Gehrke & Kay, 1984) questions are raised regarding who student teachers relate to and are influenced by during their experience. Significant input from spouses, close friends, peers, and pupils appear very commonplace, yet these individuals are not professionals. Teachers who have had mentoring relationships (Gehrke & Kay, 1984) do not refer to their cooperating teachers.

The professional and school orientation or socialization process is complicated by differences between the various investigations and the positive or negative views held by professionals. Socialization of new teachers into a school culture which is not productive (Lortie, 1975), however, does little to assist a novice and promote the continuous improvement of the profession. At the same time, without knowledge of the

current school culture and operation a person will be at a disadvantage in functioning within a work setting and student teachers report school organizational problems as a major issue in their experience (Lock, 1977).

The studies of Fuller (1969), and Glassberg and Sprinthall (1980) appear particularly relevant here providing a basis for interpreting the developmental process. Teacher education programs do not provide systematic instruction for the purpose of developing professional attitudes and beliefs or to guide the development of clearly stated personal characteristics. The study by Glassberg and Sprinthall (1980) provides some indication that greater success in student teaching occurs through enhancing individual ego and psychological development.

Professional Skills

Professional skill development is inclusive of both technical and deliberative skills (Bolin, 1988). The general purposes for student teaching provide considerable support for including teaching skills as part of the curriculum. However, the clarity and explication for what these will mean and what skills (beyond classroom management) will be given emphasis are infrequently studied or reported. Such studies which have been done generally indicate a range of skills including; managing a classroom, instructional planning, use of instructional materials and techniques of instruction, and parent reporting. In addition to these skills an emphasis is sometimes given to professional improvement skills such as reflecting on one's teaching for self-

improvement and further learning.

The high visibility of classroom management as a skill to be mastered and demonstrated during student teaching is certainly indicative of its primary position in preparation programs (Barnes & Defino, 1983; Copeland, 1983; Gallemore, 1979; Goodman, 1984; Stout, 1989). The need for pupil control frequently causes student teachers to become more custodial in their actions and is frequently perceived by supervisors as the criterion for good teaching (Fink, 1977; Jones & Harty, 1981; Ralston, 1980). Still this skill is infrequently described beyond the use of a label. By linking management skills to a specific description such as Kounin's model of classroom management (Copeland, 1983) provides information of a much deeper nature. In Copeland's study the importance of the context of the classroom and conceptual structure used to understand classrooms proved to be very useful.

Instructional plans are central to any list of goals for student teaching but are primarily identified as such through evaluation materials. Surveys on objectives for student teachers have shown planning to be rated in the top three or four most important outcomes (Gallemore, 1981). McIntyre et al. (1981) found in their study of elementary student teachers that they write objectives, they in fact do develop lesson plans, and they use and implement the plans most of the time. Students included items for introducing the lesson, learning and culminating activities. In a study of English student teachers, supervising teachers provided the text and curriculum for the student

teachers to follow (Ralston, 1980).

Similar to the objective for instructional planning an emphasis on developing instructional techniques and materials is shown through evaluation studies (Gallemore, 1981; Wragg, 1973)

The use of specific classroom observation instruments has led to numerous studies of verbal interactions (Ishler, 1967; Leonard et al., 1971; Newton, 1969). Such studies have shown increased use of desired interactions when directly addressed. However, Spurrier and Louie (1979) found that prior training in the use of questioning and praise interactions led to their use during student teaching, but student teaching did not effect a change. In addition variation in the use of verbal interactions across subject area teachers (Wragg, 1973) has also been identified. Studies elaborating on the procedures, expectations or rationale for these objectives, however, are limited.

Professional and Subject Area Knowledge

Developing and applying previously learned knowledge about education/teaching and the subjects to be taught reflects the focus of several studies. These studies may be generally classified in terms of the disciplines studied and the areas of educational foundations. A very high expectation for student teachers is the translation or application to practice of what they have learned. Many studies highlight this particular goal as being unsuccessful (Bolin, 1988; Tabachnick et al. 1979-80). When combined with reflection on practice the link is made to major recommendations for program goals (Dewey, 1904; Zeichner &

Liston, 1984). These recommendations are in the mode of deliberating about practice in contrast to the technical process of carrying out a practice.

During recent years the concept of reflecting on one's practice has found renewed support. The meaning ascribed to this practice is oriented to a student teacher reviewing teaching behaviors and relating these behaviors to undergirding conceptions of teaching or learning, considering long term effects of teaching, and developing professional goals. Zeichner & Liston (1984) have described three levels of reflection which could provide a major addition to program goals.

This self-directed process for improvement is seen by some educators as providing a greater professional perspective and generating new ideas leading to greater professional competence (Bolin, 1988; Stout, 1989). By structuring a student teaching experience to focus on reflection Glassberg and Sprinthall (1980) were able to get students engaged in this practice with positive results.

The conceptual view of subject knowledge analyzed by Tamir (1988) strongly suggests the broad nature of subject knowledge needed by teachers. Although not directly focused on student teaching the conditions described as most useful for developing this breadth of subject knowledge in combination with pedagogical knowledge is where there is access to pupils.

The focus of professional knowledge identified by Duffy et al. (1987) is on developing professional thinking skills and

decision making in contrast to specific techniques of teaching. Based on studies in the teaching of reading the effectiveness of the teacher was improved when they had a conceptual framework for making decisions to aid students in developing strategic learning skills.

General reports on what teachers should know (Reynolds, 1989; Dill, 1990) in addition to current studies of subject knowledge (McDiarmid & Wilson, 1991) add perspective to this areas but are not focused specifically on the student teaching experience.

Support for the goals described here is very uneven and suggests a need to give more focus to studies which will provide further explanation, interpretation and identification of relationships among the goals. Consideration of the goals and content to be developed during student teaching is severely limited in breadth of focus.

Program Organization

The overall program organization is a central part of all teacher education activities. The organization of a student teaching program is a major component of the entire teacher education program and as such has been extensively studied. Here the major aspects of organization will include program administration and personnel, and admission and assignments.

A series of sub-studies have been developed from data amassed by Griffin et al. (1981) via an NIE sponsored research project conducted through the auspices of the University of

Texas. These studies (Barnes, 1985; Barnes and DeFino, 1983; Griffin, 1983; O'Neal, 1983b) examined issues of time, expectations, activities conferences, pupil evaluation, decision-making, context factors, personal qualities, and the relationship of knowledge of teaching to satisfactory performance as rated by supervisors. These studies suggest the following conclusions:

1. Student teachers adopt the behaviors and expectations of cooperating teachers.
2. Length of student teaching was not a major factor.
3. Student teachers were consistently very concerned with their personal relationship with the cooperating teacher.
4. Cooperating teachers focused on teaching with comments which usually focused on immediate classroom situations. There was no evidence of an articulated knowledge based for the process of teaching.
5. Teacher candidates received very little assistance in understanding curriculum concerns except the immediate, specific lesson or unit.
6. The programs of the classrooms were dominated by commercially prepared texts and workbooks.
7. Teacher candidates were not adequately prepared to understand the common-places of schools but rather had expected to have autonomy and engage in decision-making processes. They discovered that reality was considerably less than expectations which created frustration.
8. Expectations were global and general for programs. Criteria to meet these expectations were not specified. This probably supports the conclusion that the experience lacked clarity and precision.
9. Pupil evaluation concerns were mechanistic with no organized plan for evaluating pupil progress.
10. Evaluation of student teachers was overwhelmingly positive. Failure to attain student teaching objectives was generally ascribed to some character flaw such as lack of motivation, work overload, or professional

problems.

11. Personal qualities of student teachers were used as indicators of success in teaching.
12. Craft knowledge and common sense were the basis of most decisions regarding clinical experiences.

Program Administration and Personnel

There are basically two types of programs for student teaching, one a full time experience for a designated number of weeks and one a half time experience done in conjunction with methods classes. The number of weeks involved will vary with the institution's calendar of classes usually ranging from 10-16 weeks (Griffin, 1983).

Student teaching experiences were reported from six weeks in length to one year. Little attention has been given to determine the effect of length of experience. Nelson and Ahmed (1972) concluded that a six-week experience was not a major factor. Mahan and Lacefield (1978) examined the changes from a year-long experience with two different supervising teachers. Their study did not include an analysis of the effect of the length of the student teaching experiences. Hoy and Rees (1977) and Austin-Martin (1979) studied student teaching with nine weeks and sixteen weeks length respectively, but did not include any data relative to the possible effects from length of the experience. Silvernail and Costello (1983) were concerned with the effects of a semester length experience. They compared two programs; a 30 week internship and a semester length program (two assignments of eight weeks each). They concluded that a longer pre-service

experience may reduce teachers' anxiety. However, the fact that two assignments, requiring adjustment to a different setting and teacher, was not adequately examined.

Length of the student teaching experience appears to only have been incidentally considered by studies. It is stated as a variable, but has been inadequately considered as a probable influence upon student teachers.

The personnel involved in student teaching programs includes the student teachers, cooperating teachers, college supervisor, school principals, school pupils, and college administrators such as the director of student teaching. Considerable research has been done on matching student teachers to cooperating teachers and on the attitudes and characteristics of student teachers. These studies have been included under different sections of this chapter where they seem more directly appropriate. Studies which are specific to the issue here appear to be limited.

Admission and Assignments

Teacher candidates in student teaching are placed in unique situations. Often the cooperating teacher has not been trained in the teacher education program concepts. The candidate is essentially a "guest" although real effort is usually evident to develop collegial relationships within the setting. Time factors are vital. Generally, the student teaching experience is the first comprehensive field experience.

Student teachers recognize the cooperating teacher as a significant person affecting and influencing their entry into the

profession. The evaluation/recommendation by the cooperating teacher may be the single most powerful item of influence affecting their initial employment in a teaching position. This influence of the cooperating teacher has been examined by several researchers. In general, each study supports the condition that the cooperating teacher exercises significant influence, at least during and immediately after, student teaching (Bills, 1966; Friebus, 1977; Griffin, 1983; Mahan & Lacefield, 1978; Zevin, 1974).

Friebus (1977) concluded that the cooperating teacher was very important as an agent in the student teaching experience. Mahan and Lacefield (1978) found the student teachers consistently adjusted their value orientations to reduce any disparity with that of the cooperating teachers. These shifts were again noted when the student was faced with a different cooperating teacher. They concluded that when cognitive dissonance occurs, attitudes will be changed in order to reduce dissonance.

Zevin (1974) concluded that student teachers will consistently change patterns of teaching behavior so as to model the cooperating teachers. Bills (1964) found that understanding the personality of the cooperating teacher was a reliable means to predict change in the student teachers. He noted that student teaching is a high anxiety experience where the student is very concerned about the cooperating teachers's interpretation of his/her adequacy as a teacher. The student is, therefore, more

concerned with "how to behave" than discovering "self as a teacher." Nelson and Ahmed (1972) concluded that men will be more essentialist while women will be more progressive. Age is influential with younger teachers (below 25) tending to be more progressive.

Studies of the cooperating teacher's influence confirm their influence at least during the practicum experience. Griffin (1983) concluded that although "the cooperating teacher role of socialization agent has been both analyzed and researched, there is still only a minimal understanding of the dynamics of student teacher socialization" (p. 44-46). Few clearly defined operational standards have been established to guide the selection of cooperating teachers which are followed on a consistent basis. "Selection by default" appears to be accepted among institutions (Griffin, 1983, p. 45).

Several studies focus on the influence of supervisors on student teachers. Zevin (1974) matched 16 student teachers with cooperating teachers' style of teaching which was determined by the percentage of teacher talk. Teachers with 60% or more teacher talk were labeled as "lecturer/recitation" and less than 60% were called "inquiry" type. A marked convergence of style by the student was noted even when the direction of change was counter to the expressed belief of the college supervisor. O'Neal (1983c) used data from the Texas Study to examine self-concept, flexibility and teaching concerns. A series of five quantitative measures, Fuller's teaching concerns, and audio types of

supervisory conferences were examined. The study reported a variety of specific patterns. In general, persons with higher scores on personality measures or a high personal flexibility index would be more concerned about cognitive issues. Persons with high self-concerns scores would focus on social/disciplinary matters. Although there were some differences between the focus items for cooperating teachers and student teachers, they tended to be similar; that is, similar trends from the eight measures tended to focus toward the same type of concern during the supervisory conferences.

Causal studies were concerned with using data about attitude, self-concept, and personality to measure specifics about student teaching. Bills et al. (1964) measured "openness" of cooperating teachers and then examined changes which occurred for student teachers placed with the teachers. The trend was for a negative change to occur for all student teachers. The degree of openness measured for the cooperating teachers was a predictor of change for the student teacher. Austin-Martin (1979) investigated the effect of pre-testing for dogmatism. The results indicated that student teachers pre-tested may have adopted a more dogmatic attitude than those who were not tested. Mandel-Atherstone (1980) examined the psychological profiles of eleven teachers divided according to high and low ratings based on student teaching ratings and principals' evaluations after one year of experience. Psychological profiles had been developed from testing during the pre-education semester. There were no

clear differences between the two groups. Both groups would be considered out-going, intelligent, emotionally stable, unadventuresome, and controlled. Both groups represented themselves in a favorable manner. Differences were noted in that the low group was more dogmatic and less confident while the higher group had a more integrated sense of self. Mahan and Lacefield (1978) used a pre-post design to examine change based on Festinger's theory of cognitive dissonance. They concluded that the student teachers would always adjust their value orientation toward the supervising teacher to decrease any disparity of beliefs and actions. The powerful influence of the supervising teacher was particularly important since the student teachers were in a year-long program with two separate placements. Thus, the study could document a shift in attitude based on the assignment.

Silvernail and Costello (1983) examined the differences in teachers' pupil control perspective between an internship of one year contrasted to a semester student teaching program. The only difference of significance found was that year-long interns had a significant reduction in anxiety levels contrasted to a semester of student teaching. The length of experience did not reveal changes in pupil control perspective. They concluded that the type of experience was probably of much greater influence than the length of the experience.

The study by Griffin et al. (1981) examined many influences on the student teaching experience as reported in the Barnes &

DeFino (1983) and Hukill (1983) studies. Barnes and Defino (1983) concluded that student teachers adopt the behaviors of the cooperating teacher. Hukill (1983) concluded that using conceptual levels as a measure to match student teachers with similar cooperating teachers did result in a positive involvement by the student teacher. A mix-match also had positive movement, but so considerably less as to suggest possible negative consequences.

Levin and Feeney (1970) studied the effect of student teaching in an inner-city setting. Their conclusions supported a definite shift in attitudes about discipline, control, and curriculum. The participants become less permissive and tend to follow models of experience rather than employ theories from their methods courses. They concluded that "working class" students developed a more favorable attitude toward inner-city teaching while the "middle and upper-class" students became more disillusioned. These results cannot be attributed to teaching in an inner-city situation. Similar trends are reported by Hoy and Rees (1977), Stillwell (1980), and O'Neal (1983c). Barnes and Defino (1983) used data from the Texas study by Griffin (1981) to specifically examined the effect of context on student teaching. They concluded that the experiences were more similar than different across settings. Marked differences were noted at the classroom level, but these were attributed to factors such as grade level and the cooperating teacher.

Specific research examining the influences of the student

teacher's socio-economic background has generally been either excluded from studies or superficially included. References concerning the influence of personal background does occur within the general literature, and it is accepted by teacher educators as an important, often impeding force, for achieving change. However, the attitudinal influence from the personal socio-economic factors, beyond a listing of demographic data, has not been included in studies of student teaching.

Program Activities

The kinds of general activities included in a student teaching program usually include, teaching, seminars, and general experiences, i.e. observation and planning.

Innaccone (1963) analyzed data from daily diaries, logs, interviews, and observations to determine the changes which occur in student teaching. The data supported the conclusion of gradual adoption of cooperating teacher practices even when the teacher candidate initially disagreed with these practices.

Konsfal (1981) examined the relationship of one university supervisor and student teacher. Feedback based on observations and written work was a primary factor of importance. Student teachers valued seminar time. They wanted critical feedback as well as emotional support as they were very anxious about the experience.

Goodman (1983) analyzed the influence of a seminar deliberately designed as inquiry (no one right way to teach), reflective (examine theory in relation to practice), and to

encourage candidates to follow the model of the seminar for organizing their classrooms. The focus on utilitarian questions of how discouraged analysis of why. Candidates desire to fit into the existing system reinforce adoption of the conservative practices of the field settings.

A study of the transition from observation to teaching activity with the increased responsibilities associated with it suggested this change to be critical to the success of the program and quite complex (Burstein, 1983).

Supervision and Evaluation of Practice

A central element in student teaching programs is the supervision and evaluation provided student teachers by directing teachers and college supervisors. Identifying this element as a central part of student teaching requires little exploration. Illuminating studies and practices associated with it, however, requires considerable analysis. The focus of this analysis includes background on the activities to establish the parameters of supervision and evaluation followed by studies which indicate how these various activities are carried out. The literature ranges across student teaching, teacher supervision, teaching practice and teacher evaluation. In an analysis of the various perspectives on supervision May and Zimpher (1986) suggest the need to adjust to situations and not be limited to one theoretical stance.

Most of the emphasis here is on student teaching and the research studies which have been analyzed are primarily limited

to this area. In this context the practice of supervision and evaluation in student teaching is carried out by cooperating teachers, university faculty and peers. The manner in which they provide supervision becomes one of the major forces affecting the student teacher's experience. Within this perspective of supervision many studies have been conducted to investigate supervisory practice. Studies in evaluation of student teachers have been less common.

The multiple dimensions of supervision and evaluation include such things as; observation, feedback, conferencing, evaluation criteria and evaluation processes. These major dimensions of supervision together with general perspectives provide the outline for this analysis of supervisory practice. Also considered essential to the supervisory process are activities for modeling and consulting which have a long history in student teaching programs (Johnson, 1968). By identifying these various tasks of supervision and evaluation some organization for the activities can be established but this organization doesn't imply a linear set of events nor does it highlight differences in their importance or scope.

Supervisory Practices

Supervision is broadly defined by three contrasting approaches, the direct, non-directive, and self-directive. The inspection and oversight of teachers represents a highly directive and authoritarian approach while the humanistic emphasis is a cooperative activity, oriented to improving

teaching through inspiring and encouraging individuals (Blumberg, 1985). Closely related to these differing dimensions is the continuing emphasis on directive versus non-directive techniques in supervision. Studies of these techniques show inconsistent results but seem to imply that students vary in their preference for these approaches, and that increased experience may lead to a more nondirective choice (Copeland, 1982). As used here a directive approach means offering information for immediate use to overcome instructional difficulties. A nondirective approach uses interrogative statements to solicit opinions and encourage teachers to be more self-reflective and assume greater responsibility for their decisions (Copeland, 1982).

Setting personal development goals and reflection for one's own practice represents a self-directed supervisory model. Studies in this area of supervision suggest a complex issue involving individual self-confidence, experience and opportunity. Few studies have addressed these conditions and none provide information on the extent to which they are currently followed.

These three broad perspectives can be viewed in the context of many of the practices which will be described within the major elements which follow.

Observations. Observation of teachers is basic to both supervisory activities and to evaluation Borich & Fenton, (1977) and can be developed to a state of reliability which leads to an objective documentation of classroom practice (Peterson et al.,

1985; Wiersma & Gibney, 1985).

In a historical context an analysis of the Oswego Normal School program (Dearborn, 1925) provides information on the use of observation in the student teaching experience. Goals for teacher observation in the Normal School program were to discover commendable traits of the student teacher and through this information provide encouragement to the person. In this program critic teachers were to be as unobtrusive as possible and not a constant presence in the classroom. Further, the first observations were to be more focused on the interaction of the mind in contrast to specific practice. In other words how the teacher and pupils react to each other.

The development of observation instruments has been given considerable attention during the past 25 years (Amidon, 1970; Brown, 1969; Peterson et al., 1985; Wiersma & Gibney, 1985), but the use of teacher observation techniques is not a recent development.

One group of studies in supervision relates to the content and form of observation of teaching. These studies suggest the central role played by classroom observation in all programs. The studies suggest the use of multiple skills for teaching i.e., interaction techniques, management skills, and their use in supervision. Identification of items to observe has been derived from many sources (Amidon, 1970; Brown, 1969; Peterson et al., 1985) including expert opinion, teacher effectiveness research and analysis of teaching styles. A major issue in describing

individual observation items is the degree of specificity usually described as low versus high inference (Borich and Fenton, 1977).

In contrast to structured and formal observation instruments studies by Goldhammer (1969) on teacher education interns led to the practice of preconferencing with the intern before an observation was to occur. In this preconference the lesson is reviewed and specific items identified which would be documented through observation and use in a postconference feedback session. Further indications in the variety of observation instruments is provided by McPhail (1984) who used five different instruments with student teachers to identify various kinds of teacher and student behaviors.

Glassberg's (1977) study on peer observation among student teachers showed that they can be instructed to collect observation data and provide effective feedback. With the current interest in the evaluation of inservice teachers more approaches and instruments for observation are being developed. Yet, in most cases a relationship doesn't appear to be made between the formal observation instruments and the evaluation reports. Research on what to observe would logically be tied to program goals. Instruments and procedures to obtain relevant information would then be developed and tested. The work of Wiersma & Gibney, (1985) does relate directly to this kind of development but the research is an attempt to validate the specific certification or program competencies more than to investigate the alternative observation instruments and procedures. The results of this work,

however, has given us models for observation instruments more directly applicable to preservice student teaching than are most of those observation instruments developed for use in studies of teaching effectiveness.

Feedback and reflection. Techniques for giving feedback to student teachers include sharing of observation data and providing suggestions for improvement and professional needs. Activities for reflection and feedback of observation or direct experience involve processes for thinking and planning. These techniques are the change agent of the supervision process (Grimmett, 1981) providing the means to respond to an individuals actual professional experience. The concept of cybernetics which includes some form of action followed by feedback on the effects followed by adjustment in the subsequent action might provide a model for these activities (Petrie, 1981). An outstanding example of the process combined peer observation, feedback and self-analysis using specific techniques taught to student teachers in a seminar format (Glassberg & Sprinthall, 1980). In this instance the student teachers were taught three different techniques for analyzing video tapes of their own teaching thereby obtaining extensive objective feedback on their own teaching.

A major question regarding feedback is the directive versus non-directive approach. Rooted in counseling the non-directive process for exploring a person's behavior has become submerged in the process of supervision. Yet, studies on the generalizability

of non-directive feedback on a teacher's performance have been variable and dependent on contextual and development factors (Copeland, 1982).

More specific approaches in providing feedback have included comparisons between audio, video and verbal forms (Leonard, Gies & Paden, 1971). As in most comparisons of instructional strategies identifying a clear cut winner is difficult.

Student teachers need feedback to guide the evaluation/improvement of performance. O'Neal and Edwards (1983) discovered that cooperating teachers dominate conferences with much of this talk devoted to reviewing events. Classroom events was second (37%) and giving directions third (21%). The least frequent feedback was in the area of specific evaluation either of the lessons or performance. The authors concluded that "there was no evidence of an articulated knowledge base regarding either the context and process of teaching or the content and process of training the student teacher" (p. 35). Apparently most decisions were made on a "common sense" basis rather than expected outcomes of student teaching (p. 35).

Moorefield (1974) determined that regular feedback and observation by supervisors was a concern for student teachers. He indicates that students felt somewhat insecure about themselves as teachers and desired some form of positive reinforcement on to their performance as a teacher.

Fisher (1980) provided an inservice program on generic

teaching skills to supervising teachers. He concluded that attitudes of black student teachers were significantly improved when placed with teachers who had received the generic teaching skills instruction and in the use of a feedback instrument.

A study by Copeland (1982) of 60 elementary level student teachers in California identified student teachers preferences for a directive versus a non-directive approach in supervisory conferences. The program provided a year long student teaching experience. Students responded to audio tapes modeling the two approaches on a semantic differentiated scale. The scale items included: expertness, comprehension of problem, confidentiality, trustworthiness, ability to help, sincerity, knowledge of training, and utility. Conclusions from the study include:

- a) Students varied in their choice of approach although near the end of the experience a larger number preferred the non-directive than did so at the beginning of the experience.
- b) In previous studies which were of a shorter time duration students preferred the directive type conference for all categories except confidentiality.

Using 10 supervisors and 10 special education student teachers over a 20 month time period Gitlin et al. (1984) made a comparison between the use of a horizontal form versus a competency form of supervisory conference. The horizontal form included analyzing the relationship between intent and practice used by the student teachers, and rethinking and modifying these intents based on historical perspective, alternatives to practices being used and language analysis. Video tapes and transcripts of five supervisory conferences were made and

analyzed to identify the structure, order and themes from each conference. Conclusions derived from the study include:

a) The supervisory process can be described as including four related dimensions; strategy, agenda setting, scope of issues and type of analysis.

b) The horizontal conference form leads to more relational analysis, use of more leading questions, consideration of wider issues, and the student teacher setting the agenda for analysis.

Focusing on the uncertainty and ambiguity of language used in clinical instruction and evaluative judgments during a eleven week program of student teaching the linguistic interactions of two university supervisors and six student teachers were documented and analyzed (Moon, Niemeyer & Simmons, 1988). By concentrating on the meaning and language used in conferences the researchers collected narrative accounts (journals, supervisory notes and audio tapes, and interview data, and instructional plans) of the ideas, thoughts and images held by students, supervisors and cooperating teachers. The conceptual perspective for this study rests on linguistic analysis and reflective thinking. Conclusions derived from the study include:

a) The communication between supervisor and student teacher can be made clearer by recognizing their differences in conceptual and emotional levels and putting thoughts in writing.

b) There is a developmental dimension over time in the student teachers value and belief system and in what they consider important in their experience which becomes more closely related to the supervisors orientation.

c) Patterns of supervisory comments are disjointed and do not build or develop cohesive thinking.

Conferencing with student teachers is the most typical means

by which feedback is provided. Yet this feedback may take on many forms i.e., viewing a video tape, analyzing student surveys, or interpreting a written observation form. As a central dimension to most conferences the manner in which feedback is given becomes a major issue in how to assist the student teacher.

Supervisory conferences might be viewed as including elements for feedback, reflection, a dialogue, and developing a plan for further learning. Each of these elements requires the participants to engage in interactions on issues but as Zeichner and Liston (1984) have identified these issues may vary from surface level points about where supplies are to issues on why the teacher responded in a specific manner. Their study of supervisory conferences tends to be supportive of conclusions by Griffin et al. (1981). One main difference, however, is that the student teachers set the level of complexity as the conferences were predominately factual. O'Neal and Edwards (1983) found that cooperating teachers dominated all conferences (71% to 28%). Much of the teacher talk was concerned with classroom events (37%) and giving directions (24%) with only 3% as acknowledgement. These were almost always one word comments i.e. yes, right, fine, etc.

Moorefield (1974) concluded that student teachers were concerned with regular feedback, observation, instruction on lesson plans, behavioral objectives, and discipline problems. Knoefal (1981) supported these findings with his conclusion that student teachers have high anxiety about the experience which caused them to seek technical instruction, managerial skills,

emotional support, and critical feedback. Many questions were surfaced, however, regarding the human relationship present between the supervisor and student. Both of these studies supported the university supervisor's role as being important. But the studies tended to raise more questions about the influence of the university supervisor than were answered with supported data.

Waters (1973) used a survey of 1400 persons (student teachers, cooperating teachers, principals, and university supervisors) to examine the role expectations for university supervisors. He concluded that "counseling services" were the ideal function.

These studies indicate the need to consider individual personality and contextual conditions when determining the directive or non-directive supervisory approach.

Evaluation Process

In the broad sense evaluating student teachers reflects a global perspective. Brown's (1969) study of an evaluation system uncovered a major discrepancy between espoused beliefs about student teacher performance and the actual evaluation reports. This situation led to a conclusion that evaluating teaching represents a "complex interaction of many factors, including beliefs of the teacher [plus other supervisors], observations of classroom behavior, age, sex, experience, grade level and subject taught" (p. 94).

Using a student achievement focus Denton (1982) tried to

identify relationships between the university supervisor evaluations and achievement of pupils taught by the student teacher. Twenty-eight rating areas were used in this comparison with only four showing a significant relationship between the supervisor's rating and student achievement. These factors were: developing lesson plans, using different levels of classroom questions, performance while teaching 2-week units, and personal energy level among the other factors. Not showing a relationship were content mastery and self evaluation.

Under the leadership of the Colorado Department of Education (Blome, 1987) a comprehensive evaluation report was developed for student teachers. Five major categories were included and each represented a cluster of items oriented to the major task. These categories included: planning and organization, instructional techniques, management and motivation, support relationships, and personal and professional development. The completed form involved the input and review of 32 university supervisors from four institutions, 316 student teachers and 355 cooperating teachers. Fifty-six percent of those involved indicated the report form aided in the evaluation process and all indicated it was a fair appraisal. Some very significant conclusions reported on the use of this form include:

1. The evaluation report form set the tone for the whole student teaching experience.
2. The five categories/tasks provided a good closure for the experience.
3. The cooperating teachers became more assertive in their role when using this form.

Gibney & Wiersma (1986) approached the evaluation issue by using the research studies on teacher effectiveness. Considering that teachers cannot guarantee student learning they developed a set of teacher competencies identified as resulting in student achievement. Setting up a coding system they were able to construct a profile of student teacher competence which included 49 behaviors clustered into the following categories:

1. Planning, teaching materials/equipment and evaluation.
2. Instructional strategies, techniques, and/or methods.
3. Communication with learners.
4. Professional standards.

A national study of 178 colleges and universities (Fant et al., 1985) was used to determine the extent to which current student teacher evaluations incorporated the findings from teacher effectiveness research. The analysis of evaluation materials showed that the majority of instruments only included four of eight variables which were identified as being supported by research as essential to effective teaching. Further, the two variables with the highest inclusion were for lesson plans and discipline. Several other areas not identified from this research literature were also evaluated.

The current efforts to develop an assessment system for outstanding teachers (Shulman, 1987) pose a critical question for student teaching evaluation. This issue is the linkage between the conception of teaching being held and the evaluation criteria. As indicated several times in this analysis of research

the expectations for student teaching are not clear and both the goals and the evaluation seem to rest on a global and situational context. In addition the view that student teaching is to facilitate the development of a teaching style would limit the use of a particular orientation to teaching as the basis for an evaluation.

ASSUMPTIONS OF PRACTICE

A significant component of the structural model for designing practice is the linkage provided between practice and research. This condition is accomplished by analyzing the purposes as provided in its design and formulating underlying principles or assumptions of practice. These assumptions are then compared to the conclusions derived from related research studies. The support for or negation of the assumptions of practice in relation to the context and the desired purposes of the design provide a basis for judging analysis.

The assumptions should be stated in such a way that they show relationships. These relationships should indicate how the purposes, context and operational elements interact within the design mode. The assumptions presented here are derived from the formulation of the structural model for student teaching and are primarily illustrative in nature as they are not context specific.

- 1) The supervisory model used in student teaching establishes the overall purpose and direction of student teacher activity.
2. The experiential learning process is necessary for developing effective teaching skills.

3. Success in student teaching is achieved by developing a set of personal relationships.
4. The major goals for student teachers to achieve are lesson planning and managing the classroom.
5. Clearly stated evaluation criteria provide a strong focus for the student teaching experience.
6. Cooperating teachers play a passive role in developing the professional skills of student teachers.
7. The school environment has a moderating effect on the professional attitudes of student teachers.
8. The self-concept and self-confidence of student teachers represents a major variable in their success.
9. Affective goals are not directly addressed during student teaching.
10. The classroom is the primary setting in which student teachers gain their teaching experience.

THE STRUCTURAL MODEL

The overall structural model for student teaching as formulated from this review of literature is shown in Figure 5.

Figure 5
Taxonomy of Structural Model for Student Teaching

PURPOSES AND RATIONALE FOR STUDENT TEACHING

- A. Purpose and Expected Outcomes
- B. General Perspectives and Rationale for Student Teaching

CONTEXTUAL CONDITIONS OF STUDENT TEACHING

OPERATIONAL ELEMENTS FOR STUDENT TEACHING

- A. Curricular Goals and Content
 - 1. Professional and school socialization
 - 2. Professional skills
 - 3. Professional and subject area knowledge
- B. Program Organization
 - 1. Program administration and personnel
 - 2. Admission and assignments
- C. Program Activities and Experiences
 - 1. Teaching activities
 - 2. Seminars
 - 3. General experiences
- D. Supervision and Evaluation of Practice
 - 1. Supervisory practices
 - 2. Evaluation process

ASSUMPTIONS OF PRACTICE

- A. Assumptions of practice implied by the design (relationships between purposes, context and operational elements)
-

CHAPTER 3

ANALYSIS OF A STUDENT TEACHING PROGRAM

A specific student teaching program was used to study the model for designing educational practice described in Chapter 2. This program is located in a large Eastern Land Grant University with a long history of teacher preparation. The student teaching program offered at this university is described following the format indicated in the Structural Model and includes (a) purposes and rationale, (b) context of the program, (c) operational elements of the program, (d) the underlying assumptions derived from the procedure, and (e) proposed modifications in the program based on this analysis.

PURPOSES AND RATIONALE FOR PROGRAM

Student teaching is designed to provide an opportunity for students to live the life of a teacher, to be in a real school situation, and to become involved in the major activities of a professional educator. The premises underlying the student teaching program include:

1. Student teaching is a cooperative enterprise that involves faculty and students in various university colleges, schools, divisions and departments, public schools, State Education Department, and other educational agencies.
2. Professional educators from outside the university participate in decision making relating to planning, implementing and evaluating the student teaching program.
3. Student teaching must include opportunities to demonstrate competency in general education, within their teaching specializations.
4. The student teaching program must establish methods and

procedures for making judgments about the competency of the student teacher.

5. The experiences of student teaching must relate to actual teaching situations.
6. Field based experiences should provide opportunities for work with people from diverse cultural and ethnic groups. (University, 1984)

The experience of student teaching is expected to be dynamic, challenging and a period of growth and testing one's teaching skills and theoretical knowledge against the challenges and framework of school and schooling.

The philosophy of student teaching is stated in the Student Teaching Handbook (Stanard, 1984) and provides a comprehensive perspective on the rationale and purposes of the program.

Student teaching is a developmental process in which a beginning educator grows in the art and science of teaching. It is also an interactive process, bringing the unique nature of the individual to bear on the challenges of classroom life.

The induction of "student" to "teacher" is reliant on the support of university faculty and public school faculty to bridge the realm of theoretical knowledge and practical application. The process is gradual allowing the student teacher to understand the social-political climate of schools and to raise questions: "Am I a teacher?, Can I fulfill this role? How do I go about the business of teaching? What impact does my teaching have on pupils' social, academic and physical behavior? (Fuller, 1969)

While the student teaching process is developmental, it also maintains the social and legal responsibility of providing sound educational experiences for students in schools. West Virginia Approved Teacher Education Program, (Policy 5100) stipulates that mastery of teaching competencies in planning, teaching strategies, management and pupil assessment must be attained by the student teacher. A support team of directing teacher and university supervisor works with the student teacher until such mastery is achieved and state certification is

recommended.

The team, therefore, serves as a support system to the student teacher throughout the developmental states and ensures that the student teacher is a qualified professional, ready to assume full time teaching responsibilities following the practicum. The team is vital to the experiences. As Buscaglia stated..

"When I joined forces with another person I had twice the strength to grow with twice as many alternatives." Love by L. Buscaglia (Stanard, 1984, p.2)

CONTEXTUAL CONDITIONS

The University enrolls about 18,000 students with approximately 260 student teaching each year. Program development includes cooperative efforts of faculty, students and practitioners. During the past, these groups have engaged in systematic efforts to develop teacher education programs consistent with the mission of the University, the College of Human Resources and Education, the requirements of the State Department of Education and recommendations of professional organizations and learned societies (West Virginia Un., 1984).

Beginning in 1985 the State Department of Education required individuals seeking initial certification to complete a state-approved education personnel preparation program and be recommended for certification by the institution where the approved program is completed as defined in Policy 5100. The program includes four competency tests assessing:

1. preprofessional skills
2. general studies
3. content specializations
4. professional education performance

The professional education component of the testing program

replaces previous state requirements for the student teaching practicum. Professional assessments are designed for the following levels: (a) pre-K, K; (b) early childhood, K-4; (c) middle childhood, 5-8; (d) adolescent education, 9-12; and within each area of subject matter specialization (i.e., art, mathematics, science, music, physical education).

In the context of the overall teacher education program; student teachers engage in an internship in a cooperating school under the supervision and guidance of a Directing Teacher and a University Supervisor. This course usually serves as the culminating experience in the teacher training program prior to graduation and teacher certification.

Resources available for student teacher use include the university libraries, a curriculum library, Learning Resources Center housing collections of curriculum materials, audiovisual equipment and materials and technical assistance in preparing professional quality teaching aids. County Regional Educational Service Agencies and school districts provide films, books and loan kits. Counties also supply educational specialists and guest lecturers. Student teachers consistently cite such resources as highly valuable.

OPERATIONAL ELEMENTS INCLUDED IN STUDENT TEACHING

The several dimensions of the student teaching program have been organized into a set of categories which are comprehensive, but oriented to practice. These elements provide a framework for the description of the student teaching program and include:

- a. Curricular goals and content
- b. Program organization
- c. Program activities and experiences
- d. Supervision and evaluation of practice

Curricular Goals and Content

The goals for student teaching, as stated in the Student Teaching Handbook (Stanard, 1984) and derived from State Policy, may be categorized into the following areas: (a) professional and school socialization, (b) professional skills, and (c) professional and subject area knowledge.

Professional and School Socialization

Several goals are addressed in this category including:

1. Conform to the standards of professional conduct as indicated by (a) the assigned school's handbook, and (b) the School Administrator and/or Directing Teacher.
 - Restrict personal activities, including employment in an effort to maximize student teaching effectiveness and efficiency.
 - Be punctual in attendance and performance of duties.
 - Follow school policies, rules and procedures.
2. Assist the Directing Teacher in regard to non-instructional duties and responsibilities to include serving on committees, attending faculty meetings, PTA and any other extra curricular aspects of the teaching experience.
3. Become familiar with the school resources and operations.
 - Become familiar with the library, health services, school resource specialists, community resources, clubs, audio-visual resources, emergency procedures, an fire drill regulations.
 - Inform the Directing Teacher, University Supervisor, and Coordinator of Field Experiences regarding any absence.
 - File a valid tuberculosis test clearance with the

Coordinator of Field Experiences.

Professional Skills

1. Development of lesson plans consistent with the policies of the school, needs of students, short and long range goals.
2. Implementation of plans to evidence variety of content and teaching strategies.
3. Evaluation of pupil progress.
4. Maintenance of constructive classroom management and organization conducive to a learning atmosphere.
5. Skills designated by Policy 5100 include areas for pre-teaching, teaching, post teaching, and general professional activities are listed as follows:

Pre-teaching: [design of unit and lesson plans]

- a. Incorporate learning goals
- b. Incorporate outcomes and objectives
- c. Incorporate student characteristics
- d. Incorporate teacher characteristics
- e. Apply personal framework
- f. Plan instructional strategies
- g. Select, develop, modify instruction materials
- h. Determine classroom procedures and organization
- i. Incorporate information in planning for instruction
- j. Select assessment strategies

Teaching: [effective classroom management, questioning and feedback]

- a. Maintain positive learning environment
- b. Communicate with students to provide context
- c. Organize students, materials, environment
- d. Manage instructional environment
- e. Implement variety of instructional materials, strategies
- f. Utilize questioning strategies
- g. Provide feedback

Other Professional Activities: [demonstrate communication skills]

Professional and Subject Area Knowledge

The professional knowledge area includes those goals which address the broader aspects of relating foundational and methods

studies, and the subject area knowledge in the context of the student teaching experience. The following items from the state Policy 5100 relate to these goals.

Post-Teaching: [evaluation and report]

- a. Evaluate effectiveness of instruction
- b. Evaluate student progress
- c. Organize, interpret, summarize evaluation data
- d. Report student evaluation results
- e. Use evaluation results

Program Organization

The organization of the program is described as administration and personnel, and the admission and assignment providing for the student experience.

Program Administration and Personnel

Institutional arrangements include a letter of agreement between the university and the cooperating schools outlining the student teacher practicum and responsibilities of both parties. These letters are required by the State Department of Education and are refiled annually. The University now has agreements with nineteen (19) counties in two states involving 97 schools.

Student teachers are placed in rural and town schools selected for their quality, nature and proximity to campus. Eighty percent of all placements are in Home County where the University is located.

The American Indian project enables university students to participate in Navajo, Hopi Pagago or Apache schools in New Mexico, Arizona and Utah in conjunction with a program sponsored by Indiana University. These student teachers are supervised by

Indiana University supervisors and trained educational leaders on site. Most housing is provided by American Indian federal and state public schools in exchange for 15 hours per week for after-school service student teachers provide to Indian pupils. These services may include coaching, tutoring, sponsoring field trips and student organizations. Four State University students participated in this program in 1984 and 10 students have applied in 1985.

Personnel involved in student teaching include the University Supervisors, Directing Teachers, Student Teachers, Coordinator of Field Experiences, Pupils and Principals.

Student teachers. Students from all teaching specialties across the university who are near the completion of their undergraduate program will be included in the program.

University faculty. Regular faculty members and graduate students provide course work and supervision in the program. Regular faculty normally average 3 credit hours for supervision which equates to supervision and seminars for 6 student teachers. Faculty from Curriculum and Instruction supervise within their field of expertise (i.e. science and math). Faculty in teacher education outside the college supervise their own students. This includes fields of Art, Music, Library Science, and Physical Education. Regular faculty have earned doctorates from many universities including; Ohio State University, Michigan State University, Syracuse University, University of Illinois and West Virginia University graduate students have academic training in

their assignment and prior teaching experience in public schools. All supervisors are also teacher educators. Approximately 35 faculty supervise students during each semester.

The supervisor has the following responsibilities:

1. Act as a liaison between the university and the schools.
2. Function as a support person for both the directing teacher and the student teacher.
3. Conduct conferences and/or seminars for student teachers and directing teachers.
4. Gather and interpret data on student teacher behavior, learning environment, and student outcomes.

Directing teachers. Directing teachers must have a minimal number of two years of teaching experience, appropriate certification, expression of interest in working with a student teacher and a commitment to attendance at meetings regarding student teaching. Directing teachers are recommended by their principals and superintendents and file application for supervision with the Coordinator of Field Experience on an annual basis. Directing teachers are rewarded by cash payments of \$100 or tuition waivers for one three hour graduate course from the university. Data from a 1984 survey of Directing teacher applications revealed that the average applicant had twelve years of experience. Over 50 percent of the applicants held a Masters Degree or above and 25 percent had supervised fewer than seven student teachers. The college employs approximately 400 Directing teachers each year.

The directing teacher has responsibility for the following

Activities:

1. Become acquainted with the needs, interests, and abilities of the student teacher.
2. Orient the student teacher to the teaching process by creating opportunities for:
 - a) Observing and implementing effective teaching strategies.
 - b) Diagnosing and evaluating student progress.
 - c) Planning and developing lesson plans and content materials.
 - d) Efficient classroom management and organization.
3. Familiarize the student teacher with the policies, faculty, staff and resources for the school.
4. Evaluate student progress:
 - a) Engage in daily conferencing with the student teacher.
 - b) Document conferences for future reference.
 - c) Participate in a joint conference with the university supervisor and the student teacher to complete a narrative and checklist evaluation.
5. Attend scheduled directing teacher seminars developed and organized by the Office of the Coordinator of Field Experiences.

Coordinator of field experience. The Coordinator of Field Experiences has a doctorate in Teacher Education and Professional Development, and is directly involved in student teaching service activities with the state, national and regional educational organizations. She teaches off-campus classes in Supervision of Student Teaching and classroom management, but has primary responsibility in administering early field placements and student teaching placements for the teacher education program. The Coordinator regularly supervises seven student teachers in rural and town schools and in American Indian schools in Southwestern U. S. each semester.

The Coordinator secures applications for directing teachers

annually, makes arrangements for all field placements, makes all formal agreements with superintendents and schools. She also arranges and manages the public relations with school districts for the college and administers behavioral contracts for student teachers having difficulty in their experience. The Coordinator engages in research activities similar to other faculty and has a staff of one part-time secretary and one graduate assistant. The staff provides a monthly newsletter for program participants.

In addition the Coordinator of Field Experiences will:

1. Organize and coordinate the total program of student teaching.
2. Be involved in a supervisory capacity as part of the support/liaison system between the university and the schools.

Pupils. Because of the large number of school districts (19) involved in the student teaching program pupil characteristics vary considerably. However, the majority of student teacher placements are in a local County where the socio-economic level is bi-modal. A large population of pupils (over 50%) qualify for federal free lunch programs and live in rural areas. Parental employment includes farming, coal-mining, labor and small business. The second pupil population is comprised of children of university faculty who tend to score high on achievement tests and experience a wide variety of travel and enrichment opportunities. According to recent reports from the State Department of Education, pupils in the state typically score in the fiftieth percentile on standardized achievement tests at almost every grade level.

Principals. Principals provide in school coordination of student teachers and are involved in the selection of directing teachers. Principals receive a \$50 stipend and also earn a tuition waiver for their cooperation and assistance.

The principal will serve in a school leadership role with the following responsibilities:

1. Provide leadership conducive to optimum development of the student teaching program.
2. Orient the student teacher to the school, policies, faculty, staff, and resources.
3. Observe and evaluate the student teacher.

Admission and Assignments

Students seeking admission into elementary and secondary education may declare their major upon entering the university or may do so before they have successfully completed 58 hours of university course work. Those who declare earlier are given Pre-Education status, and those who meet specific requirements and complete 58 hours of course work are designated as Education majors.

Evidence of academic ability of Pre-Education students is provided through high school transcripts and ACT scores. Pre-Education majors in the fall of 1984 had an average ACT score of 17.6. Students who entered the university before fall of 1985 were required to have a 2.0 GPA before being accepted into teacher education and a 2.25 before entering student teaching.

Students currently are required to have a 2.25 GPA on all approved course work in their area of specialization and in

professional education courses. In addition they must maintain an acceptable level of performance, as mandated by the state and the university, on the National Teacher Examination Pre-Professional Skills Test, Speech and Hearing Test, American College Testing Program College Outcome Measures Project, and microcomputer and listening competency assessments.

The application process for placement includes the following steps:

1. The Coordinator of Field Experiences mails applications to area principals each spring.
2. Principals distribute applications to teachers who meet university requirements.
3. Principals sign applications.
4. County superintendents may review applications.
5. Applications are received by the Coordinator of Field Experiences.
6. University Supervisors advise the Coordinator of Field Experiences of appropriate matches of student teacher and directing teacher.
7. School lists are sent to superintendents and principals for review to determine appropriate quotas within each school.
8. The Coordinator of Field Experiences makes adjustments on placements.
9. Directing teachers and students teachers are notified of placements.
10. Final placement school lists are mailed to superintendents.

While the ideal selection process is stated emergencies arise due to (a) shortages in placements within specialized fields, (b) student teachers with special concerns requiring

placement outside of the regular locations, and (c) in the Indian Project in which Indiana University follows their assignment process. During the last fall semester approximately 10% of the student teachers were assigned in this manner.

Student teachers are assigned to field experiences for each area of specialization, therefore, many students have multiple experiences. Student teachers teach for approximately fourteen weeks. Elementary student teachers have two practica. One practicum is in a multi-subject classroom grades 1-6. The second practicum is located in a different school. At this site student teachers teach within a specialization area (4-8 math, science, social studies, English, Spanish, or kindergarten). If the elementary student teacher is not seeking an additional endorsement he/she student teaches at another grade level at a different site.

Secondary student teachers have one practicum following a two week seminar. Students seeking K-12 certification in art, music, physical education or vocational agriculture have two practica in early and adolescent grade levels. These practica may be held at two or more schools and are preceded by a three week methods course.

Program Activities

Activities for student teachers include (a) orientation to the classroom and school, (b) structured observation, (c) partial teaching (two weeks), (d) full-time teaching (three or more weeks), (e) participation in non-instructional activities, (f)

attendance at after-school seminars, (g) maintaining a journal, (h) self-evaluation, and (i) completion of a check-list of activities at each site.

The interactive context for participants in the student teaching program occurs through; (a) student teaching handbook, (b) orientation meeting for student teachers, (c) seminars, and (d) evaluation.

The Student Teaching Handbook is provided as a communication tool for directing teachers, university supervisors, and student teachers. The realm of student teaching is dynamic and challenging. It a period of growth and testing one's teaching skills and theoretical knowledge against the challenges and framework of school and schooling. This handbook is intended as a guide to help structure and enhance the student teaching experience. Additionally, it serves to provide communication tools for the participants and functions as a flexible document, subject to change and modification. Choices in evaluation and data collection instruments are provided to meet individual needs and concerns of directing teachers and student teachers.

Teaching Activities

The student teacher may assume direct responsibility for classroom instruction as early as the end of the first week of the placement by planning and teaching a lesson to a small group or whole class. Responsibility for planning and teaching is gradually increased until the student teacher is teaching all classes and/or periods. The student teacher assumes full teaching

responsibilities when the directing teacher in cooperation with the student teacher deems it advisable. Each student teaching situation is an individual one with intervening variables. However, one approach is to assign teaching responsibilities by adding a subject or class period a day until by the end of the third week the student teacher is teaching all classes and/or subject. The directing teacher, during the last week of the placement, gradually assumes the teaching responsibility for the classes which facilitates pupil reorientation and student teacher culminating experiences.

Many sources for resource materials are available to student teachers in the local area.

Seminars

Small and whole group seminars are provided to give student teachers an opportunity to reflect on experiences and expand knowledge and resources. The University Supervisor will schedule these meetings over the course of the semester. The small group sessions may last from one to three hours. Seminars will enable student teachers and University Supervisor to share ideas and experiences, engage in problem solving, and learn about additional materials and alternative approaches to teaching.

Whole group seminars are schedule as necessary to disseminate relevant information to all student teachers. Some of these and other topics may include; certification, job seeking and interview skills, school law, classroom management, teaching concerns, self-concept, data collection and evaluation, and

teaching the exceptional student.

General Activities

General activities for orienting student teachers to the assignment include:

1. Discuss parking, lunch facilities, faculty lounge, coat racks, and desk or work space for the student teacher.
2. Introduce the student teacher to the class by clarifying the role of the student teacher to the pupils.
3. Introduce the student teacher to faculty, staff and resource persons.
4. Discuss expectations concerning lesson plans. (Usually the student teacher will follow the lesson plan format used by the directing teacher.)
5. Explain methods for evaluating the student teacher.
6. Give the student teacher meaningful tasks to perform so that there is an immediate co-worker relationship.
7. Provide a school handbook or information on school rules.
8. Explain procedure for recording and reporting pupil attendance.
9. Discuss methods of instruction and pupil evaluation.
10. Orient the student teacher to audio-visual equipment and resources.
11. Discuss techniques for classroom organization and management.
12. Explain non-instructional duties; hall, playground, lunchroom, bus, school activities.
13. Provide opportunities for the student teacher to observe in other classrooms.

The student teacher is required to keep a journal of the student teaching experience by writing at least one entry each day. The journal should reflect experiences, in an

autobiographical form, related to student teaching and centering on the following items:

- classroom teaching
- books or articles read
- discussions in seminars
- thoughts
- self-reflecting
- lesson planning

The journals may be voluntarily shared with the University Supervisor and other student teachers in seminars and provide a frame of reference for discussion, clarification, and analysis. At various times student teachers may be asked to address specific issues or problems in the journal.

Supervision and Evaluation of Practice

Directing teachers engage in multiple activities as part of their supervisory role including: (a) orienting the student teacher, (b) observing (c) conferencing, (d) serving as a role model, and (e) providing weekly and final written and oral evaluations. The teachers spend about 80 percent of the time in classrooms while student teachers are teaching. They also participate in three two-hour inservice meetings each semester they supervise a student teacher.

Supervisory Practices

The university supervisors include full-time faculty and graduate assistants as previously described. University supervisors observe (see Appendix B) on a bi-weekly basis utilizing clinical supervision and general supervision techniques. Most supervisors regularly hold three-way conferences (see Appendix C) at the conclusion of the observation and

maintain a written record of activities.

School and university supervisors vary in the frequency, type and length of supervisory activities. However, in exit interviews and on rating forms covering five semesters, over 90 percent of the student teachers reported positive interactions with their directing teachers and university supervisors. In these reports and interviews, students cited appreciation for support, sharing of materials and methods, instructional feedback, being allowed to try new ideas, and the role model provided by the professionals.

Evaluation Process

Evaluation is intended to be both formative, occurring weekly, or bi-weekly and summative occurring at the end of the semester (see Appendix D). The student teacher engages in self-evaluation as well during each of these stages.

Responsibilities for evaluation include:

Student teacher responsibilities.

1. Self-evaluation on a weekly basis.
2. Completion of the final evaluation checklist in cooperation with the directing teacher and university supervisor.
3. Evaluation of Directing Teaching, University Supervisor, and Teacher Preparation Program.
4. Student Teaching program evaluation during an exit interview with the Coordinator of Field Experiences.

Directing teacher responsibilities.

1. Informal daily evaluation of the student teacher through discussion, notes, or observation forms.
2. Weekly written assessment of the student teacher's progress using designated forms.

3. Completion of the final evaluation checklist and a 3-way discussion of student teacher progress with the university supervisor and student teacher.
4. Completion of the final evaluation narrative.
5. Optional self-evaluation to reflect strengths and weaknesses as a directing teacher.

University supervisor responsibilities.

1. Informal data collection to be shared with the directing teacher and student teacher using observation form, discussion, notes, or checklists.
2. Review of student teaching checklists.
3. Completion of final evaluation checklist and a 3-way discussion of student teacher progress with the directing teacher and student teacher.

Coordinator of field experiences responsibilities.

1. Program evaluation each semester.
2. Exit interviews each semester.
3. Maintenance of all records and evaluations of student teachers, directing teachers and supervisors.
4. Recorder of grades.

Criteria. To receive a passing grade for the seminar course a student teacher must: (a) keep a quality journal, (b) attend school regularly, and (c) actively participate in group meetings, and (d) secondary student teachers must also complete additional C & I assignments made prior to student teaching. To receive a passing grade in student teaching the student must be evaluated as proficient in each category indicated on the final evaluation and within each specialization area. Over the past five semesters, approximately two out of every 100 student teachers receive an Incomplete and one out of every 100 an Unsatisfactory

in student teaching each semester. Ninety-seven percent of all student teachers have received a satisfactory for their practicum. Student teachers may repeat the practicum one time in an attempt to receive a satisfactory grade. A satisfactory grade is required for state certification.

Quality assessment. Besides the full accreditation by NCATE and program approval by the State Department of Education, there are several other kinds of quality assessments.

One source of judgment of the quality of the program is the evaluation by program students. They consistently judge the program to be excellent (over 90%); place high value on the student teaching experience and, in particular, their effective relationship with University Supervisors and directing teachers; and consider the general richness of experience and perspective afforded by the large university faculty to be a distinctive asset to the quality of their undergraduate professional preparation.

Data derived from surveys and interviews with directing teachers who work with students in field experiences and in student teaching indicated the program to be of high quality and reflects their active participation in program development. They have positive views of this professional involvement, the inservice seminars and meetings the program provides for them, and their collaborative work with university supervisors and other program faculty.

Another source of quality judgment is employers, and

graduates are consistently sought after not only by schools in the home state, but also by schools in neighboring states. When program graduates must, for personal reasons, seek placements in more distant areas, they have no difficulty finding professional positions in schools. Approximately 100 school districts from 10 states annually send education recruiters to campus.

ASSUMPTIONS OF PRACTICE

The following statements of assumptions are derived from the student teaching program as it is described here. Conclusions or findings from research studies are used to indicate a negation or refutation of these assumptions and in this context indicate if the practice to which it is related should be changed. Less attention is given to whether the assumption is supported by research given the difficulty to determine when enough evidence is produced to say something is positive, but obviously this issue is still an important consideration.

The organization of these assumptions and reporting of related research follows the categories for student teaching described earlier in a synthesis of professional knowledge. Following each assumption are references to related research studies with indications (where appropriate) of issues with support or negation of the assumption.

List of Assumptions and Related Research Studies

1. Student teaching is a stressful experience for student teachers.

-Student teachers are overwhelmed by the field experience. (Hodges, 1983)

-A 30 week student program reduced student teacher anxiety. (Silvernail & Costello, 1983)

2. Former student teachers are capable of recommending competent directing teachers.
3. Directing teachers are capable of assessing student teacher performance.

-Directing teachers do not use any kind of articulated, clear or objective criteria to evaluate student teachers. University supervisors and directing teachers use different criteria to do formative evaluation but similar criteria for the final evaluation. (Barnes, 1983).

-University faculty and teachers from the same subject area have a high correlation in evaluating student teachers. (Wheeler & Knoop, 1982).

4. The directing teacher is significant in training the student teacher; the student teacher will be shaped by the directing teacher.

-The primary force guiding the elementary student teacher's behavior is the school curriculum. Student teachers are positively reinforced by directing teachers if they follow the curriculum and the class runs smoothly. (Goodman, 1984).

-Attitudes between student teacher and directing teacher are most congruent at the end of the student teaching experience. (Hogben & Lawrence, 1983).

-Student teacher attitudes shift during student teaching in the direction of being bureaucratic and custodial. (Hoy & Rees, 1977).

-Directing teachers indicate their role should be greater in decisions about content, subject matter, techniques, and methodology used by student teachers. (Kapel, 1978).

-Shift from liberal to traditional values occurs in student teachers while working with directing teachers. (Mahan & Lacefield, 1978).

5. A competent directing teacher serves four major roles. These include (a) orienting to the profession/support person, (b) role model, (c) facilitator of learning (allows student teacher to take over class, try new ideas, etc., and (d) evaluator (formative and

summative; formal and informal).

-Directing teachers provide role model in shaping attitudes of student teacher. (Hogben & Lawrence, 1983).

-Directing teachers provide role model in influencing bureaucratic and custodial attitudes of student teachers. (Hoy & Rees, 1977).

-Seventy-seven percent of 377 first year teachers responded that directing teachers had been a good role model. (Queen & Gretes, 1981).

-Student teachers did not change teaching style (lecture or discovery) when placed with directing teachers using these methods. (Zevin, 1974).

6. The university supervisor provides a liaison role with the university.

-University supervisors perceive they serve a liaison role. (Koehler, 1984).

-University supervisors communicate university expectations for student teaching experience. (Zimpher et al., 1980).

7. The university supervisor provides a support role for directing teachers.

-University supervisors provide an outlet for directing teachers to give criticism. (Koehler, 1984).

-University supervisors perceptions on practicality of experience and their assessment of school quality differs from the directing teachers. (Peterson, 1977).

-University supervisors act as a confidant to directing teachers and receive information from them on student teacher problems. (Zimpher et al., 1980).

8. The university supervisor provides a support role for student teachers.

-University supervisors provide a counseling role for student teachers. Counseling role is not highly perceived by student teachers. (Waters, 1973).

-University supervisors serve as personal confidant to student teachers. (Zimpher et al., 1980).

9. The university supervisor provides a facilitating role.
 - University supervisors provide a supportive role. (Koehler, 1984).
 - University supervisors provide a counseling role. (Waters, 1973).
 - University supervisor enhances directing teacher and student teacher communication. (Zimpher et al., 1980).
10. The university supervisor provides an evaluation role.
 - University supervisor sets expectations and provides critical feedback for student teachers. (Koehler, 1984).
 - University supervisor sets expectations and provides critical feedback for student teachers. (Zimpher et al., 1980).
11. University supervisors should be subject matter specialists.
 - University supervisor perceives role differently than supervisors jointly appointed by school and university. (Koehler, 1984).
 - Student teachers view generalist supervisors as satisfactory as the specialist. (Schwartz, 1971).
12. University supervisors should be members of the teacher education unit.
 - University supervisor perceives role differently than supervisors jointly appointed by school and university. (Koehler, 1984).
13. University supervisors are capable of recommending competent directing teachers.
14. Principals and superintendents are capable of recommending competent directing teachers.
 - Selection of directing teachers is done by the school administrators in most instances. (Morris et al., 1981-82).
15. The coordinator of field experiences should be an expert in teacher education/supervision.
16. It is beneficial for elementary student teachers to

have two practica. These practica should be in different schools, be directed by two different university supervisors and two different directing teachers.

-Elementary student teachers hold attitudes and beliefs about teaching which are more similar to their directing teachers than do secondary student teachers. (Casey & McNeil, 1972).

-In 4 months of student teaching there is insufficient time available with the directing teacher to foster conceptual development. (Hukill, 1983).

-During the first 36 weeks of field experience student teachers shift to more traditional values, but when shifted in assignment at this point no further change occurs. (Mahan & Lacefield, 1978).

-There is insufficient time during an 11 week student teaching experience to conduct diagnosis and provide prescription for change of student teachers. (Zimpher et al., 1980).

17. Student teachers should be assigned singly (as opposed to pairs) to a directing teacher.

-Cluster assignments to schools result in more observations; more use of seminars and more common problems among student teachers being identified. (Schwartz, 1971).

18. Multicultural field placements broaden the knowledge base for student teachers:

-Placement in cultural settings cause conflict with role expectation and facilitates change in student teachers' functioning. Student teachers also indicated some trend to more traditional values. (Harty, 1977).

-Student teachers paired in bi-racial teams resulted in both student teachers changing attitudes more appropriate to the group with which they were working and become more accepting of pupil behaviors. (Shoudel, 1969).

19. Because of the number of pupils with whom secondary student teachers interact it is important to have a single site for student teaching.

-Elementary student teachers hold attitudes and beliefs about teaching which are more similar to their

directing teachers than do secondary student teachers.
(Casey & McNeil, 1972).

20. The university should have clear administrative agreements with school districts to outline procedures and legal responsibilities of all parties in the cooperative program.

-The director of field experiences has almost no input in selection of directing teachers. (Morris et al., 1981-82)

21. Seminars are helpful in orienting directing teachers and providing ongoing staff-development.

-The use of a more intensive supervisory model by directing teachers did not result in changes in supervision practice. (Colbert, 1978)

-Student teacher attitude towards teaching is increased by directing teachers who are engaged in studying generic teaching skills. (Fisher, 1980)

-Directing teachers do not perceive seminars as an important incentive for supervision. (Whaley & Wolfe, 1984)

22. Tuition waivers further the educational expertise of directing teachers and principals.

-Directing teachers support payment for supervision in preference to course credit and tuition. (Whaley & Wolfe, 1984)

23. It is important to reward directing teachers for supervision efforts through cash payments, tuition waivers and university privileges.

-Directing teachers perceive greatest rewards for supervision as payment, title, recognition and professional association. (Whaley & Wolfe, 1984)

24. The school principal aids in the supervisory process and, therefore, should be rewarded through cash payments or tuition waivers.

25. Selection and training of directing teachers is an important responsibility of the university.

26. Cultural preparation course work is necessary for student teachers in ethnic minority settings.

27. Student teachers should acquire three-fourths of their course work in their specialization and all education courses prior to student teaching.
- Student teachers exhibit a lack of subject matter background in planning for pupil evaluation. (Barnes, 1983)
 - Student teachers are not sure of their ability to diagnose pupil needs. (Hodges, 1983)
 - Student teacher problems are handling student discipline, organizing for individualized instruction and coping with pupil difficulty in following directions. (Purcell & Seiferth, 1982)
28. Student teachers must achieve average or above average grades in all university course work.
29. Student teachers must meet state and university eligibility prior to their practica and exit assessments prior to certification.
30. A full semester (12-15 weeks) is needed to develop skills and teacher behaviors for entry level teaching.
- Student teachers need more than 4 months experience to develop higher conceptual levels of functioning. (Hukill, 1983)
 - Directing teachers influence student teacher attitudes to become more traditional in a 36 week field experience. (Mahan & Lacefield, 1978)
 - Student teachers spend limited time on conferencing, field trips and teaching small groups. (Seiferth & Solliday, 1980)
 - A 30 week student program reduced student teacher anxiety, but the type of experience is also crucial. (Silvernail & Costello, 1983)
 - An eleven week field experience is insufficient time to diagnose and prescribe learning experiences for student teachers. (Zimpher et al., 1980)
31. Elementary student teachers benefit from multiple placements to include a variety of settings (rural, town), schools, directing teachers and grade level.
32. Student teachers should be involved in instructional activities.

-Student teachers do not approach evaluation positively, but rather on a subjective basis. (Barnes, 1983)

-Student teacher success in Kounin management techniques include learning the classroom environment and recognizing typical conditions. (Copeland, 1983)

-During the field experience student teachers give up on trying to individualize instruction. (Hodges, 1983)

-First year teachers desire more student teaching experience in keeping records, managing a classroom, conferring with parents and promoting positive relationships with administrators. (Queen & Gretes, 1981)

-Directing teachers should help student teachers plan more introductory and concluding activities, and emphasize a large repertoire of developmental activities. (McIntyre, et al., 1981)

33. Student teachers should use a wide variety of community and school resources.

34. Student teachers benefit from small group seminars held by university supervisors.

-Extensive seminars focusing on either lecture or inquiry teaching modes influence student teachers mode of teaching on only a limited basis. (Zevin, 1974)

35. Student teachers should be involved in non-instructional duties.

36. Student teachers benefit from a support team including a university supervisor and directing teacher.

-Professional support is perceived as a product of interpersonal relationships not affected by the setting. (Cross et al., 1969)

-Directing teachers, university supervisors, pupils, other teachers, and peers all provide support for student teacher needs. (Friebus, 1977)

37. Student teachers benefit from university supervisor visits.

-Student teachers tend to prefer a direct supervisory approach. (Copeland, 1981)

-Student teachers desire positive reinforcement related to performance as a teacher. In beginning their field experience student teachers desire regular observation and feedback from supervisors on planning, methodology and discipline problems. (Moorefield, 1974)

-Indirect supervision results in more accurate student teacher self-evaluation. Student teachers with lower self-concepts benefit more from a direct supervisory approach. (Vukovich & Pfeiffer, 1979)

38. Communication is important between directing teacher and student teacher.

-Supervisory conferences focus on how-to conversations. (Griffin, 1983)

-Supervisory conferences are led by directing teachers and focus on teaching events. (O'Neal, 1983a)

-Student teachers set the level of discourse complexity in supervisory conferences with teaching procedures representing the most frequent issue discussed. (Zeichner & Liston, 1984)

39. Student teachers benefit from observations.

-Student teachers improve teaching skills by obtaining feedback from directing teachers. (Fisher, 1980)

40. Directing teachers should be in the classroom 80 percent of the time.

41. Student teachers benefit from reflection (journals) and self-evaluation (weekly forms). Such reflective activities foster developmental growth.

-Guided self-analysis of video-taped lessons do not influence student teacher indirect teaching mode. (Kajewski, 1976)

-Student teachers have difficulty in self-rating due to influence by directing teachers rating. Student teachers' self-evaluation influences their self-concepts but are inconsistent. (Lee, 1972)

-Student teachers feel they achieve self-set goals during student teaching. (Schafer, 1981)

-Indirect supervision techniques result in more accurate self-evaluation for student teachers with good

self- concepts. (Vukovich & Pfeiffer, 1979)

-Self rating contrasts sharply with university supervisor and directing teacher ratings. (Wheeler & Knoop, 1982)

42. Student teacher evaluation is most accurate when including directing teachers, university supervisors, and student teachers.

-Directing teachers and student teachers have a high correlation on final performance ratings. (Defino, 1983)

-Student teachers evaluate themselves significantly different than do university supervisors and directing teachers. (Wheeler & Knoop, 1982)

PROPOSED MODIFICATIONS IN THE PROGRAM

Three assumptions will be used here as examples for interpreting the match with research and consideration for modifying the student teaching practice. Additional modifications are proposed in this case study but are not reported here.

Based on the information presented one assumption will be identified as being supported by research, but with some questions concerning the interpretation of the research and two assumptions will be identified as being negated by the research. These assumptions are:

Number 4 which states that "the directing teacher is significant in training the student teacher- the student teacher will be shaped by the directing teacher."

Number 30 which states that "a full semester (12-15 weeks) is needed to develop skills and teacher behaviors for entry level teaching."

Number 41 which states that "student teachers benefit from reflection (journals) and self-evaluation (weekly forms). Such reflective activities foster developmental growth."

Other assumptions are also negated by research conclusions but these three will be used here for explanatory purposes.

Research on the influence of directing teachers strongly supports assumption four. Support for influencing attitude change, reinforcement provided for management and the implementation of the desired curriculum are indicators of the impact of the directing teacher. Based on this limited evidence practice related to this assumption should continue. A further consideration, however, is the relationship between the effects of this influence by directing teachers to the program goals. There is some indication that these may not be consistent. Consequently, further clarification of goals needs to be made before a conclusion is reached.

A different situation is apparent for assumption number 30 on length of the student teaching experience. In this case research studies do not support the assumption. Diagnosing student teacher problems and prescribing further activities based on these problems, and emphasizing the development of higher conceptual levels for student teachers are not fully accomplished in a 11-16 week term. In addition anxiety about teaching is largely eliminated after a 30 week student teaching experience. A suggested modification in practice based on this information would be to establish a 36 week experience with a supervisor who

provides the necessary diagnosis and prescription activities, and who stimulates the conceptual development of the student teacher.

The assumption for reflection and self-evaluation (41) is partially negated by research. Although mixed results from the studies restrain one from suggesting the elimination of this activity the studies do imply some of the techniques are not effective. The studies indicate that self-analysis does not influence indirect teaching, has inconsistent effects on self-concept, and self-ratings are not consistent with supervisor ratings. On the other hand students with a strong self-concept do improve their self-evaluation via indirect supervision. A proposed modification for this practice would be to identify, through the assignment process, those student teachers with a strong self-concept and individualize the form of self-evaluation and feedback used with them. The other student teachers could benefit more from structured feedback and evaluation.

SUMMARY

This analysis of a student teaching program has followed the process described in Chapter 1 which is represented in the Structural Model for Designing educational practice. The example also has contributed to the clarification and organization of the Structural Model for student teaching practice described in Chapter 2. The proposals for modification reflect differences between the assumptions of practice and related research studies. More modifications could be identified with further analysis but

those suggested appear to be significant in the context of the program described here.

CHAPTER 4

REFLECTIONS

Proposing a formal model for the design and analysis of educational practices implies that a body of professional knowledge with some conceptual capacity is possible to develop in the field of education. Establishing a structural scheme for such knowledge accommodates to the variable purposes and context of the practices and to the diversity of personnel involved. Professional judgment is essential to each education practice but a structure within which these judgments can be made is provided by this design model.

Another major issue implied by this model is that professional practices and the knowledge inherent in carrying out these practices is organized around a model for a given practice. This concept is in contrast to a model of professional knowledge being structured around an eclectic set of principles derived from multiple disciplines and theories.

The major benefits for this concept of knowledge of educational practices are multiple. Practices can be learned and the knowledge contributing to them can be infused into a systematic improvement. An accumulation and evaluation of such knowledge is possible. The analysis of problems encountered in carrying out the practice can be more clearly defined and studied due to the structural dimension and the related information on purpose and context for the practice. And finally, given the potential for improving problem identification and the

incorporation of assumptions of practice inquiry into practice can be more highly focused.

The design model provided here has been developed in an effort to establish a more systematic means for improving educational practice. Applying the design to a specific practice, that of student teaching, has provided for both the development of a structural model for student teaching and an illustration for using the model for analyzing and modifying a practice in a specific setting or context. The use of an example for the application of the model has helped refine it and to test the process. Once a structural model has been developed for a given practice it can then be applied to many different settings where the practice is being used. Therefore, the structural model can be used to design and/or analyze any student teaching program.

The pay off for this design model is obviously in the improvement of the practice analyzed or designed or in the identification of principles of practice and/or problems surfaced in the process.

Several modifications in the student teaching program analyzed here were suggested. The basis for these suggestions reflects a combination of negated assumptions or principles and conflicts between assumptions and purposes. In this study conclusions from a number of research studies have been directly related to the formulated assumptions. Providing the research in this form has been done to further illustrate the model but would probably not be explicitly stated as such in most analyses.

Obviously the matching of research conclusions and assumptions of practice is important but might be done in a less formal manner.

Unfortunately testing the modifications in this study was impossible due to legislative changes within the state where the program is located and change in program personnel. Consequently the outcomes of the proposed program were not forthcoming. Areas of inquiry and the identification of problems, however, can easily be gleaned from the analysis.

One of the important issues indicated here is that global responses to program activities is not necessarily a positive change in practice. This condition is highlighted by the activities related to reflection on practice and development of self-confidence. The mode of supervision and the perceptions held about teaching are also issues which need to be addressed differently with different students. These kinds of issues raise the need for further research to explore relationships of specific operational elements within a given context and stated purposes. Further, inquiry into program descriptions of purposes and of curricular goals is also needed to provide greater definition of expectations. Several additional problems and inquiry oriented issues can be identified from the analysis. Some specific areas needing further study are indicated through the analysis of the research in building the structural model and in reviewing the assumptions of practice.

Using this design model the accumulation of program designs and analyses for student teaching would appear to have great

potential for the improvement of practice. By using a common format, such as this mode., to organize the information obtained the value of the studies would be greatly enhanced. In the long run this model appears to provide a very strong means for bringing together practitioners in the field with people conducting inquiry in the field. It also establishes a focal point for cooperation between these groups based on problem identification and problem solving.

Leadership for the changes needed in the knowledge system to capitalize on this design model will need to be provided by a coalition of agencies. But some key initiatives which could establish a foundation on which to build such a structure could be taken by key groups in the field Holzner (1979) provides a model for the knowledge system for use which includes knowledge production, knowledge resource (organization, storage, retrieval, distribution), and knowledge use. Given this mode of the knowledge system and the design model described here the current system is clearly in need for change.

Our current institutions could be part of this change, but they present a poor history as initiators for new organizational schemes. Given that the orientation of these needs in the system are highly focused on professional practice it would appear that the initiation for changes will be most successful if centered in agencies and organizations currently providing the education practice.

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APPENDIX

APPENDIX A
Research Summary

RESEARCH SUMMARY

Bibliographic Data

Descriptors

Purpose of study (purpose, research questions, conceptual orientation)

Context of study

Design of study (population, data collection, instruments, analysis)

Conclusions from study

APPENDIX B
Instructional Observation

INSTRUCTIONAL OBSERVATION

FORM A-2

Teacher Observed _____ Subject/Grade Level: _____

Observer _____ Date _____ Time: _____ to _____

Focus for Observation _____

- I. **Physical Environment** (i.e., how the teacher uses the environment)
Description:

- II. **Preparation/Planning** (including objectives, activities, materials, and evaluation)
Description:

- III. **Instruction**
Description:

- IV. **Management of Classroom**
Description:

- V. **Additional Comments:**

APPENDIX C
Weekly Progress Form

OFFICE OF STUDENT TEACHING

WEEKLY PROGRESS FORM

STUDENT _____ SCHOOL _____

Cooperating Teacher _____ Week of _____

University Supervisor _____

	Commendable		Satisfactory		Weak	
1. Evidence of Appropriate Planning and Organization	1	2	3	4	5	NA
2. Appropriate Use of Teaching Method	1	2	3	4	5	NA
3. Knowledge of and Appropriate Use of Content	1	2	3	4	5	NA
4. Classroom Control	1	2	3	4	5	NA
5. Involvement of Students	1	2	3	4	5	NA
6. Relationships with Students	1	2	3	4	5	NA
7. Use of Appropriate Evaluative Techniques	1	2	3	4	5	NA
8. Enthusiasm For Teaching	1	2	3	4	5	NA
9. Management of Time	1	2	3	4	5	NA

10. Cooperating Teacher's Comments _____

11. ☐ Check here if you want university supervisor to contact you.

APPENDIX D
Final Evaluation

College of Human Resources and Education
Final Evaluation of Student Teaching

Student Teacher _____ Dates _____ - _____
mo/day/yr mo/day/yr

School, City _____ Grade/Subjects _____

Directing Teacher _____ Univ. Supervisor _____

The Student Teacher (ST), Directing Teacher (DT), and University Supervisor (US) will record the appropriate rating to assess the student teaching experience:

3 = commendable

2 = satisfactory

1 = needs improvement

Instructional competencies

- a. Knowledge of subject matter
- B. Daily and long range planning
- c. Selection, variety, and implementation of methods
- d. Creativity and use of instructional materials
- e. Classroom management which fosters learning environment
- f. Pupil diagnosis and assessment

DT US ST

a.			
b.			
c.			
d.			
e.			
f.			

Professional attributes

- g. Knowledge and understanding of pupil development
- h. Motivation and enthusiasm toward teaching
- i. Rapport and professional relationship with pupils
- j. Commitment to extra curricular duties
- k. Relationship and understanding of parents and community

g.			
h.			
i.			
j.			
k.			

Personal attributes

- l. Communication skills of speaking, writing & listening
- m. Ability to analyze and self evaluate teaching strengths and weaknesses
- n. Emotional maturity
- o. Health and attendance
- p. Ability and commitment potential

l.
m.
n.
o.
p.

Days Absent _____ Times Tardy _____ Make-Up Days _____

Personal Assessment: Satisfactory _____ Unsatisfactory _____ Incomplete _____

Directing Teacher _____

University Supervisor _____

Student Teacher _____